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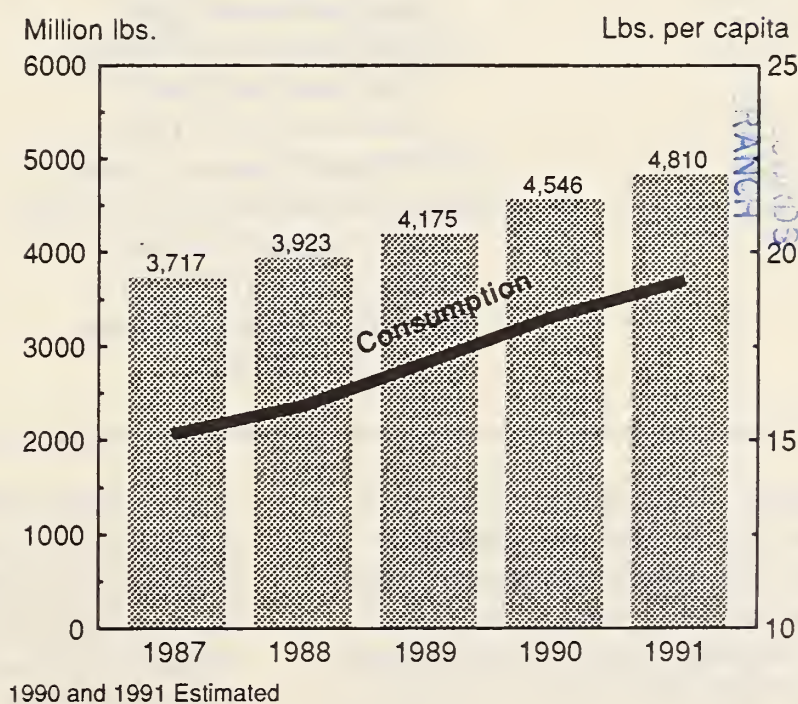
Economic  
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LPS-44  
November 1990

# Livestock and Poultry

## Situation and Outlook Report

Turkey Production and  
Consumption Trends





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## Summary

### Turkeys Plentiful for Holiday Season

Consumers will find plentiful supplies of turkey for the holiday season. Frozen stocks on September 30 were at record levels, up 8 percent from last year. Fourth-quarter turkey production is expected to be up 5 percent. Retail prices are expected to run slightly above last year. Turkey production will increase about 6 percent in 1991, compared with 9 percent in 1990. This reflects average returns only slightly above breakeven in 1990. The current year wholesale prices of 63-64 cents will continue about the same in 1991.

Consumers will find hams less plentiful this year than last and can expect to pay higher prices. Frozen ham stocks on September 30 were 22 percent below a year ago. Fourth-quarter commercial pork production is expected down 3 percent from a year ago. Wholesale ham prices (17-20 lb.) rose to over \$1 per pound in late September but have not exhibited the typical strong seasonal upward pattern this fall. Last year, ham prices reached only \$1 per pound late in the holiday buying season.

Broiler production increased 6 percent this year. Wholesale prices will average about 7 percent below a year ago. This

price decline has been tempered by record exports and stronger red meat prices. In 1991, given continuing good returns, production is projected to increase 6 percent and prices to remain about the same as in 1990.

Table egg production and prices in 1990 are expected to be about the same as 1989. In 1991, table egg production is projected to increase about 1 percent above 1990, with New York wholesale prices averaging 71-77 cents per dozen.

Tight supplies of red meats boosted retail beef and pork prices to record levels in 1990. Because of high red meat prices relative to poultry, fewer red meats are being specialed. Slightly larger red meat supplies are expected in 1991. Per capita red meat and poultry consumption is expected to rise about 6 pounds in 1991, from the record of around 220 pounds in 1989 and 1990. Beef and pork retail prices are projected to be near the 1990 level.

Favorable producer returns will encourage continued expansion in the poultry and pork sectors. Reduced nonfed slaughter will nearly offset increased fed beef production. Choice steer prices in 1991 are expected to be slightly higher than in 1990, and barrows and gilts a little lower.



Table 1--Livestock, poultry, and egg production and prices (All percent changes shown are from a year earlier.)

| Item                             | 1988   | 1989   | 1990   |        |        |        |           | 1991 1/ |        |        |
|----------------------------------|--------|--------|--------|--------|--------|--------|-----------|---------|--------|--------|
|                                  | Annual | Annual | I      | II     | III    | IV 1/  | Annual 1/ | I       | II     | Annual |
| Million pounds                   |        |        |        |        |        |        |           |         |        |        |
| Production:                      |        |        |        |        |        |        |           |         |        |        |
| Beef                             | 23,424 | 22,974 | 5,507  | 5,733  | 5,814  | 5,650  | 22,704    | 5,525   | 5,725  | 23,000 |
| % change                         | 0      | -2     | 0      | -1     | -1     | -2     | -1        | 0       | 0      | 1      |
| Pork                             | 15,623 | 15,759 | 3,902  | 3,645  | 3,639  | 4,050  | 15,236    | 3,825   | 3,800  | 15,750 |
| % change                         | 9      | 1      | 0      | -7     | -4     | -3     | -3        | -2      | 4      | 3      |
| Lamb & mutton                    | 329    | 341    | 93     | 90     | 85     | 95     | 363       | 95      | 88     | 363    |
| % change                         | 6      | 4      | 6      | 12     | 5      | 3      | 6         | 2       | -2     | 0      |
| Veal                             | 387    | 344    | 79     | 74     | 80     | 80     | 313       | 74      | 72     | 292    |
| % change                         | -7     | -11    | -13    | -13    | -5     | -5     | -9        | -6      | -3     | -7     |
| Total red meat                   | 39,763 | 39,418 | 9,581  | 9,542  | 9,618  | 9,875  | 38,616    | 9,519   | 9,685  | 39,405 |
| % change                         | 3      | -1     | 0      | -3     | -2     | -2     | -2        | -1      | 1      | 2      |
| Broilers 2/                      | 16,124 | 17,334 | 4,495  | 4,657  | 4,613  | 4,680  | 18,445    | 4,750   | 4,975  | 19,500 |
| % change                         | 4      | 8      | 9      | 6      | 5      | 6      | 6         | 6       | 7      | 6      |
| Turkeys 2/                       | 3,923  | 4,175  | 983    | 1,102  | 1,221  | 1,240  | 4,546     | 1,040   | 1,170  | 4,810  |
| % change                         | 6      | 6      | 22     | 9      | 4      | 5      | 9         | 6       | 6      | 6      |
| Total poultry 3/                 | 20,588 | 22,039 | 5,611  | 5,904  | 5,963  | 6,055  | 23,533    | 5,925   | 6,285  | 24,845 |
| % change                         | 4      | 7      | 11     | 7      | 5      | 6      | 7         | 6       | 6      | 6      |
| Total red meat and poultry       | 60,351 | 61,457 | 15,192 | 15,446 | 15,581 | 15,930 | 62,149    | 15,444  | 15,970 | 64,250 |
| % change                         | 4      | 2      | 4      | 0      | 0      | 1      | 1         | 2       | 3      | 3      |
| Million dozen                    |        |        |        |        |        |        |           |         |        |        |
| Eggs                             | 5,784  | 5,587  | 1,390  | 1,413  | 1,412  | 1,435  | 5,650     | 1,415   | 1,430  | 5,715  |
| % change                         | -1     | -3     | 0      | 1      | 2      | 1      | 1         | 2       | 1      | 1      |
| Dollars per cwt                  |        |        |        |        |        |        |           |         |        |        |
| Prices                           |        |        |        |        |        |        |           |         |        |        |
| Choice steers, Omaha             |        |        |        |        |        |        |           |         |        |        |
| 1000-1100 lb.                    | 69.54  | 72.52  | 77.20  | 77.52  | 75.48  | 76-78  | 76-77     | 74-80   | 76-82  | 75-81  |
| Barrows and gilts, 7-markets     | 43.39  | 44.03  | 49.45  | 59.01  | 57.67  | 53-55  | 55-56     | 50-56   | 51-57  | 50-56  |
| Slaughter lambs, Ch., San Angelo | 68.26  | 67.32  | 59.62  | 59.65  | 52.07  | 53-55  | 56-57     | 54-60   | 57-63  | 54-60  |
| Cents per pound                  |        |        |        |        |        |        |           |         |        |        |
| Broilers, 12-city avg. 4/        | 56.3   | 59.0   | 56.5   | 56.6   | 57.2   | 48-50  | 54-55     | 50-56   | 52-58  | 51-57  |
| Turkeys, Eastern region 5/       | 61.2   | 66.7   | 56.5   | 61.3   | 66.3   | 69-71  | 63-64     | 55-61   | 60-66  | 61-67  |
| Cents per dozen                  |        |        |        |        |        |        |           |         |        |        |
| Eggs                             |        |        |        |        |        |        |           |         |        |        |
| New York 6/                      | 62.1   | 81.9   | 87.8   | 74.6   | 77.8   | 84-86  | 81-82     | 72-78   | 69-75  | 71-77  |

1/ Projected. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers.

## Factors Affecting Livestock And Poultry

Livestock and poultry producers face a continued slow growing economy and a higher rate of inflation. The economy, as measured by the real gross national product (GNP), is expected to grow about 1 percent in 1990. Most measures of economic activity are mixed. Employment declined by 68,000 jobs in October, the fourth-consecutive-monthly drop. The civilian unemployment rate was 5.7 percent, the highest monthly rate since May 1988. Industrial production in July-October was around 2 percent higher than a year earlier.

The inflation rate in recent months rose at a swifter pace than a year ago, due primarily to rising energy prices. Since the problems in the Middle East began last summer, oil prices have surged and been volatile. Foreign crude oil spot prices averaged \$35 per barrel in October, compared with below \$16 in June. The repercussions are likely to be felt into 1991 with higher prices for diesel, gasoline, and other oil-based products. The GNP deflator is expected to rise between 4.5 and 5 percent in 1990 and around 5 percent in 1991.

Interest rate behavior has been mixed, with short-term rates edging down and long-term rates increasing slightly due to future uncertainties. The lengthy debate over the Federal budget created additional financial-market concern. The final budget agreement, cutting the deficit almost \$50 billion in the next year and about \$500 billion over the next 5 years, allowed the Federal Reserve to ease interest rates slightly. Inflationary pressure from higher energy costs leaves little room for interest rates to decline significantly. The bank prime rate is expected to average about 10 percent in 1990 and 1991.

Corn production in 1990/91 is estimated at 7.94 billion bushels, up over 400 million over a year ago. Farm corn prices are expected to average \$2.20 to \$2.60 per bushel in 1990/91, compared with \$2.36 in 1989/90. Beginning stocks were 1.34 billion bushels in 1990/91, down from 1.93 billion in 1989/90. Given the smaller stocks, a drought in 1991 likely would increase corn prices sharply.

Soybean production is forecast to be 1.90 billion bushels in 1990/91, down 1 percent from a year ago. Soybean meal prices are expected to average \$160-\$185 per ton in 1990/91, compared with \$173.50 in 1989/90. Overall feed costs are projected to be about the same in 1990/91 as in 1989/90.

## Poultry and Eggs

### Turkeys

**Strong Production Growth in 1990—But a Moderate Second Half** Turkey production in 1990 is expected to increase 9 per-

Table 2--Federally inspected turkey slaughter, 1988-90

| Year   | Number  | Average weight | Live-weight    | Certified RTC |
|--------|---------|----------------|----------------|---------------|
|        | Million | Pounds         | Million pounds |               |
| 1988   |         |                |                |               |
| I      | 50.3    | 21.0           | 1,054.0        | 836.6         |
| II     | 60.0    | 20.6           | 1,236.3        | 981.1         |
| III    | 65.7    | 20.4           | 1,343.3        | 1,065.6       |
| IV     | 61.4    | 21.4           | 1,314.2        | 1,040.1       |
| Year   | 237.4   | 20.9           | 4,947.7        | 3,923.4       |
| 1989   |         |                |                |               |
| I      | 47.9    | 21.2           | 1,012.0        | 803.5         |
| II     | 61.8    | 20.7           | 1,279.1        | 1,014.3       |
| III    | 72.4    | 20.5           | 1,483.0        | 1,176.4       |
| IV     | 69.6    | 21.5           | 1,492.4        | 1,180.6       |
| Year   | 251.7   | 21.0           | 5,266.5        | 4,174.8       |
| 1990   |         |                |                |               |
| I 1/   | 57.2    | 21.7           | 1,240.2        | 983.4         |
| II 1/  | 65.6    | 21.2           | 1,391.6        | 1,101.7       |
| III 1/ | 74.6    | 20.8           | 1,548.0        | 1,221.1       |

1/ Preliminary.

Table 3--Turkey hatchery operations 1/

|       | Total turkeys placed 2/ |         |         | Eggs in incubators first of month, changes from previous year |         |         |
|-------|-------------------------|---------|---------|---|---------|---------|
|       | 1988/89                 | 1989/90 | 1990/91 | 1988/89   | 1989/90 | 1990/91 |
|       | - - Thousands - - -     |         |         | - - Percent - -   |         |         |
| Sept. | 15,725                  | 19,900  | 19,705  | 7   | 27      | 2       |
| Oct.  | 16,821                  | 20,169  |         | 5   | 25      | 0       |
| Nov.  | 18,413                  | 20,733  |         | 4   | 14      |         |
| Dec.  | 20,444                  | 21,511  |         | 6   | 13      |         |
| Jan.  | 23,183                  | 24,702  |         | 2   | 9       |         |
| Feb.  | 23,842                  | 24,870  |         | 6   | 6       |         |
| Mar.  | 26,959                  | 27,286  |         | 5   | 1       |         |
| Apr.  | 25,973                  | 28,904  |         | 8   | 6       |         |
| May   | 28,369                  | 29,036  |         | 10  | 5       |         |
| June  | 29,039                  | 29,196  |         | 12  | 7       |         |
| July  | 26,329                  | 29,030  |         | 16  | 2       |         |
| Aug.  | 23,002                  | 25,631  |         | 21  | 11      |         |

1/ Breakdown by breed not shown to avoid disclosing individual operations. 2/ Excludes exported poults.

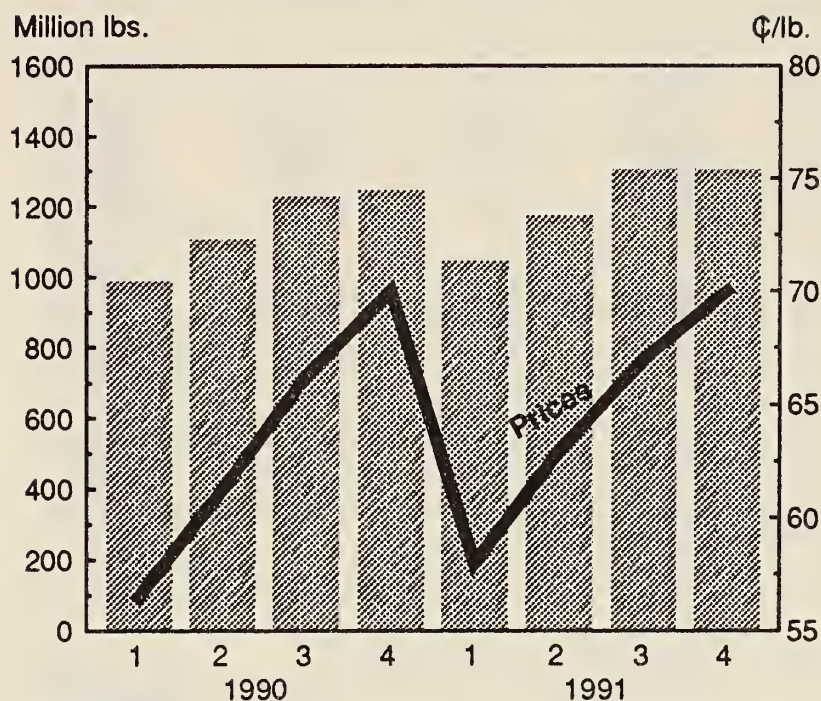
cent. First-quarter production, 22 percent above a year earlier, was exceptionally strong. Growth slowed to a moderate 4-5 percent during the second half. Monthly, year-over-year poult placement increases have fluctuated widely since the second quarter, between a low of 1 percent and a high of 10 percent. These swings probably reflect steps to slow production growth after the low returns of the first quarter. However, following a month or two of only slight increases in placements, some producers apparently believed they had an opportunity to raise production. Then placements rose sharply again.

### Continued but Slower Growth in 1991

Production in 1991 is projected to rise 5-7 percent. Prospects for positive returns this fall together with expectations for 1991 feed prices to be near current levels will encourage expansion next year. Output in first-quarter 1991, based on lower September placements but 6 percent higher placements in October, would normally be expected to increase 4-6 percent. However, first-quarter production might actually increase 5-7 percent because of a spillover of slaughter from



Figure 1  
Turkey production and prices  
1990 and 1991 estimates



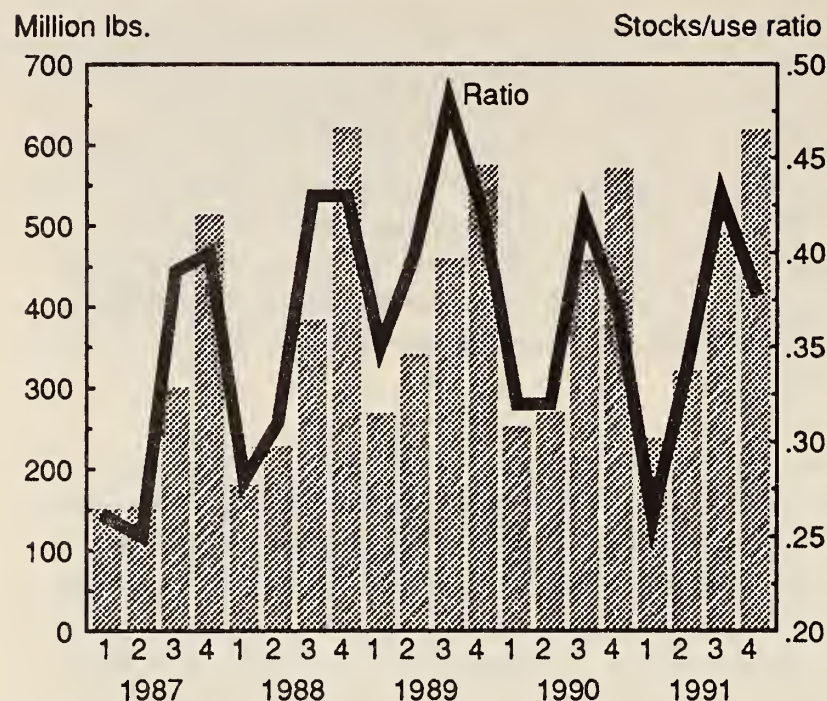
FI, RTC Basis

December to January, due to expected reductions in slaughter-plant schedules during the holidays

**Prices Gained Steadily During 1990, but Averaged Below 1989**

Wholesale turkey prices moved up steadily this year, following weakness in the early months. In the second half, prices gained strength as production grew only moderately. High red meat prices helped support these increases in the face of continued turkey production growth. Hen prices rose

Figure 2  
Turkey stocks and stocks/use ratios



Ratio is beginning-of-quarter stocks divided by disappearance

sharply in October to the highest level in 2 years. Prices in November however, will likely be pressured downward by the drawdown of near-record stocks and by the winding down of Thanksgiving sales. Stronger production growth in December coupled with a normal seasonal decline, is expected to continue the pressure on fourth quarter prices. However, prices of whole turkeys are low relative to hams, and this could favor turkey consumption at Christmas this year. For the fourth quarter, Eastern region hens are expected to average 69-71 cents, about the same as last year.

Table 4--Turkey prices and price spreads

| Item                                       | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Avg.  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Cents/lb.                                  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Farm price 1/:                             |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                                       | 35.1  | 35.8  | 35.7  | 36.3  | 35.5  | 34.1  | 33.5  | 32.1  | 31.3  | 30.2  | 34.0  | 38.4  | 34.3  |
| 1988                                       | 32.3  | 29.7  | 28.4  | 28.4  | 29.8  | 32.1  | 40.4  | 42.0  | 45.4  | 48.4  | 47.9  | 38.3  | 37.3  |
| 1989                                       | 35.5  | 38.4  | 40.3  | 42.0  | 43.6  | 43.8  | 41.2  | 40.8  | 36.4  | 38.2  | 40.7  | 39.3  | 40.0  |
| 1990                                       | 35.9  | 33.7  | 37.2  | 37.0  | 38.2  | 38.2  | 38.4  | 39.9  | 40.6  | 42.2  |       |       |       |
| New York, hens, 8-16 lb 2/:                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                                       | 55.3  | 58.5  | 60.3  | 58.3  | 55.3  | 55.7  | 56.3  | 56.1  | 56.1  | 54.7  | 60.7  | 66.5  | 57.8  |
| 1988                                       | 52.8  | 47.1  | 47.0  | 46.9  | 49.3  | 57.1  | 70.8  | 70.5  | 76.0  | 79.6  | 76.0  | 61.6  | 61.1  |
| 1989                                       | 59.0  | 62.2  | 65.7  | 68.3  | 72.1  | 73.0  | 66.4  | 62.6  | 57.9  | 67.8  | 72.5  | 72.7  | 66.7  |
| 1990                                       | 55.6  | 55.2  | 58.9  | 59.6  | 61.3  | 62.9  | 63.4  | 66.6  | 69.0  | 76.2  |       |       |       |
| 4 region average retail price, wholebirds: |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                                       | 103.6 | 103.2 | 103.0 | 100.4 | 102.8 | 105.1 | 105.8 | 105.1 | 103.3 | 102.6 | 90.0  | 89.3  | 101.2 |
| 1988                                       | 93.1  | 92.9  | 91.0  | 89.4  | 92.9  | 92.9  | 96.0  | 99.5  | 100.6 | 104.0 | 99.2  | 97.1  | 95.7  |
| 1989                                       | 97.4  | 96.8  | 97.6  | 98.3  | 100.1 | 101.3 | 104.6 | 104.1 | 102.0 | 102.2 | 93.2  | 95.0  | 99.4  |
| 1990                                       | 98.9  | 98.3  | 99.4  | 97.1  | 99.8  | 99.8  | 100.8 | 101.4 | 103.3 |       |       |       |       |
| Price spreads, retail-to-consumer:         |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                                       | 39.8  | 37.4  | 35.4  | 33.4  | 37.3  | 40.1  | 41.1  | 41.8  | 39.0  | 38.3  | 22.0  | 13.6  | 34.9  |
| 1988                                       | 29.8  | 35.0  | 33.4  | 33.0  | 35.1  | 24.6  | 23.7  | 21.0  | 17.3  | 16.5  | 14.7  | 26.7  | 25.9  |
| 1989                                       | 29.8  | 29.9  | 25.7  | 23.2  | 20.7  | 20.7  | 30.2  | 32.3  | 34.2  | 28.9  | 13.4  | 15.4  | 25.4  |
| 1990                                       | 33.7  | 33.7  | 32.1  | 27.7  | 29.8  | 29.7  | 32.1  | 27.8  | 26.7  |       |       |       |       |
| 1982-84 = 100                              |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Consumer price index 3/:                   |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                                       | 113.3 | 111.6 | 112.0 | 109.6 | 111.6 | 111.8 | 112.1 | 111.6 | 109.4 | 109.2 | 103.5 | 103.9 | 110.0 |
| 1988                                       | 107.7 | 107.2 | 107.2 | 107.5 | 108.3 | 109.3 | 109.8 | 112.4 | 114.2 | 115.5 | 113.1 | 113.3 | 110.5 |
| 1989                                       | 114.2 | 116.3 | 118.7 | 121.5 | 123.2 | 124.1 | 126.0 | 124.6 | 124.4 | 123.2 | 119.2 | 121.1 | 121.4 |
| 1990                                       | 123.9 | 124.2 | 124.6 | 123.4 | 123.6 | 122.7 | 123.9 | 123.1 | 124.7 |       |       |       |       |

1/ Liveweight. 2/ Wholesale, ready-to-cook. 3/ Other poultry CPI.



Prices for the year, given large supply increases, will average about 64 cents or lower than the 66.7 cents of 1989. As usual, prices in November and December will also depend on the degree of specializing by retailers. Whole turkeys are typically used as loss leaders during the Thanksgiving season.

#### **Retail Prices About the Same as Last Year**

Whole bird retail prices have been very stable, averaging \$1.00 a pound through September, almost identical to last year. Prices are expected to drop seasonally in the fourth quarter, but will probably average slightly above the 97 cents of 1989. For the year, retail prices are estimated to average just under \$1.00 a pound. Prices during 1991 are expected to be about the same

#### **Little Change Expected in 1991 Wholesale Prices**

Wholesale prices in 1991 are expected to average nearly the same as this year, with very slight increases early in the year. Expected continued high prices for red meats will help support turkey prices. Anticipated increases in consumer purchases of processed turkey meats should provide basic support in the market. Eastern region hens are expected to average 62-68 cents per pound compared with an estimated 64 cents this year.

#### **Consumption Gains To Continue**

Per capita consumption in 1991 is expected to increase to 19.3 pounds up 1 pound from this year. Consumption for 1990 at 4.6 billion pounds, will be up 8 percent. In the first half, consumption jumped 12 percent, facilitated by relatively low prices and the first industry-wide promotion campaign. Fourth-quarter growth is estimated at 5 percent, with per capita consumption at about 6.4 pounds or 35 percent of the annual total of 18.3 pounds. The share of consumption in the fourth quarter has held steady since 1988. Near-record stocks of 617 million pounds on October 1 will facilitate increased holiday season consumption this year.

#### **Net Returns Near Breakeven Expected**

Estimated net returns moved above breakeven in the third quarter this year, assisted by feed prices, the lowest since 1987. October returns at 9.5 cents per pound were the highest in 2 years and fourth-quarter returns are expected to average a favorable 5-7 cents. For 1990 overall, however, returns are estimated to average at or near breakeven, but still better than those of 1987-1989. Prior to the third quarter upturn of this year, four consecutive quarters of negative or only breakeven returns had been experienced. While only 33-40 percent of utilization is estimated to be whole turkey, these net return calculations using whole bird wholesale prices give an indication of the magnitude and direction of changes in returns. For 1991, estimated net returns are expected to change little from this year. Feed prices are expected to average about the same as this year and turkey

prices are also expected to be about the same or just slightly above this year.

#### **Production Leaders Grew in 1990**

The USDA preliminary estimate of turkeys raised during 1990, 281 million birds, is 8 percent above 1989. Of the three leading States, North Carolina and California realized above-average increases and Minnesota increased just below the average. Their combined share of 49 percent of birds raised in 1990 is up from 48 percent in 1989 and 43 percent in 1980. Arkansas, another leading State, also had a large increase this year, but increases in Missouri and Virginia, other leading producers, were smaller.

The number of farmers growing turkeys in 1987 has not changed much since 1978, but according to the 1987 Census of Agriculture, production is more concentrated among the largest producers, who have increased in number since 1978. Out of around 7,300 growers in 1987, 638 sold 100,000 or more turkeys and accounted for 58 percent of total sales, up from 46 percent in 1978. North Carolina had 138 of these large producers, representing 52 percent of its sales in 1987. Minnesota had 119 large producers with 83 percent of sales, and California had 90 large growers raising 90 percent of its sales in 1987. In North Carolina, however, growers with sales of 30,000 or more but less than 100,000 birds, also

Table 5--Turkeys: Number raised, total of all breeds

| States  | 1985        | 1986    | 1987    | 1988    | 1989    | 1990    |
|---------|-------------|---------|---------|---------|---------|---------|
|         | 1,000 Birds |         |         |         |         |         |
| Ark.    | 16,000      | 16,500  | 18,000  | 18,000  | 19,800  | 22,000  |
| Calif.  | 20,500      | 21,900  | 25,500  | 26,500  | 30,200  | 33,300  |
| Colo.   | 2/          | 2/      | 2/      | 2/      | 2/      | 2/      |
| Conn.   | 35          | 40      | 30      | 30      | 30      | 30      |
| Del.    | 11          | 3/      | 3/      | 3/      | 3/      | 3/      |
| Ga.     | 2,631       | 2,426   | 2,432   | 2,400   | 1,900   | 2,100   |
| Ill.    | 280         | 347     | 698     | 1,700   | 3,280   | 4,610   |
| Ind.    | 6,941       | 9,370   | 13,000  | 13,200  | 13,200  | 13,200  |
| Iowa    | 6,300       | 7,000   | 8,500   | 7,800   | 7,600   | 8,200   |
| Kans.   | 275         | 150     | 231     | 227     | 324     | 225     |
| Md.     | 129         | 125     | 133     | 135     | 100     | 105     |
| Mass.   | 156         | 145     | 140     | 150     | 150     | 150     |
| Mich.   | 2,300       | 2,700   | 3,000   | 3,000   | 4,200   | 4,400   |
| Minn.   | 30,400      | 34,200  | 40,500  | 38,500  | 43,100  | 45,500  |
| Mo.     | 12,500      | 13,500  | 15,500  | 16,500  | 17,300  | 18,000  |
| Nebr.   | 918         | 1,437   | 1,942   | 1,770   | 1,670   | 1,940   |
| N.H.    | 28          | 26      | 26      | 26      | 26      | 20      |
| N.J.    | 88          | 100     | 115     | 100     | 100     | 100     |
| N.Y.    | 314         | 343     | 448     | 343     | 400     | 400     |
| N.C.    | 31,850      | 39,100  | 48,350  | 47,900  | 52,200  | 57,700  |
| N. Dak. | 900         | 1,000   | 1,240   | 1,150   | 1,280   | 1,350   |
| Ohio    | 2,800       | 3,100   | 3,400   | 3,600   | 4,100   | 4,700   |
| Okla.   | 2/          | 2/      | 2/      | 2/      | 2/      | 2/      |
| Oreg.   | 1,300       | 1,510   | 1,830   | 1,800   | 2,100   | 2,200   |
| Pa.     | 7,100       | 7,800   | 8,000   | 7,900   | 8,400   | 8,400   |
| S.C.    | 2,850       | 3,900   | 3,950   | 5,570   | 5,360   | 5,400   |
| S. Dak. | 1,723       | 1,968   | 2,376   | 2,370   | 2,220   | 2,570   |
| Tex.    | 2/          | 2/      | 2/      | 2/      | 2/      | 2/      |
| Utah    | 3,082       | 3,390   | 3,731   | 3,900   | 3,590   | 3,800   |
| Va.     | 13,066      | 14,307  | 16,200  | 16,300  | 16,600  | 17,000  |
| W. Va.  | 2,400       | 2,220   | 2,400   | 2,300   | 2,870   | 3,850   |
| Wisc.   | 6,150       | 6,128   | 5,450   | 2/      | 2/      | 2/      |
| Oth.    | 12,400      | 12,500  | 13,316  | 19,250  | 19,500  | 20,050  |
| U.S.    | 185,427     | 207,232 | 240,438 | 242,421 | 261,600 | 281,300 |

1/ 1989 revised. 1990 preliminary based on turkeys placed September 1, 1989 through August 31, 1990. Excludes young turkeys lost. 2/ Combined to avoid disclosure of individual operations. 3/ Maryland and Delaware combined.



Table 6--Federally inspected young chicken slaughter, 1988-90

| Year   | Number  | Average weight | Live weight    | Certified RTC |
|--------|---------|----------------|----------------|---------------|
|        | Million | Pounds         | Million pounds |               |
| 1988:  |         |                |                |               |
| I      | 1,267   | 4.35           | 5,511          | 3,996         |
| II     | 1,303   | 4.30           | 5,611          | 4,079         |
| III    | 1,317   | 4.20           | 5,530          | 4,035         |
| IV     | 1,272   | 4.36           | 5,555          | 4,015         |
| Year   | 5,159   | 4.30           | 22,208         | 16,124        |
| 1989:  |         |                |                |               |
| I      | 1,310   | 4.35           | 5,698          | 4,129         |
| II     | 1,394   | 4.33           | 6,032          | 4,389         |
| III    | 1,412   | 4.29           | 6,052          | 4,395         |
| IV     | 1,383   | 4.41           | 6,101          | 4,420         |
| Year   | 5,499   | 4.34           | 23,882         | 17,334        |
| 1990:  |         |                |                |               |
| I 1/   | 1,412   | 4.39           | 6,201          | 4,495         |
| II 1/  | 1,470   | 4.36           | 6,416          | 4,657         |
| III 1/ | 1,479   | 4.29           | 6,346          | 4,613         |

1/ Preliminary.

increased substantially in number, and their sales accounted for an estimated 46 percent of statewide sales.

## Broilers

### Production Up Over 6 Percent in 1990

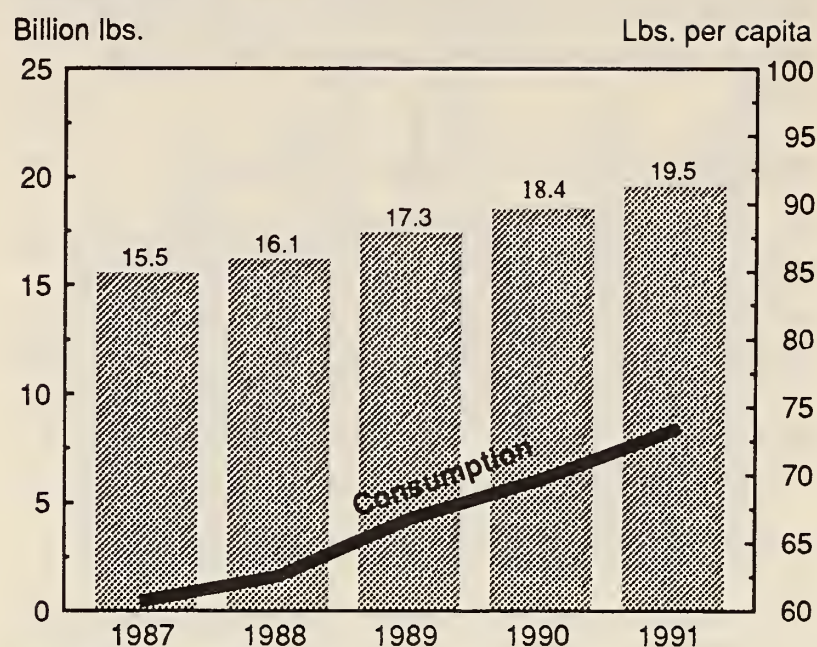
Broiler production for 1990 is forecast to reach 18.4 billion pounds, increasing over 6 percent, as producers responded to continued positive net returns. Substantial growth occurred during the first quarter of 1990, when production increased 9 percent from a year ago. Production increases slowed beginning in second-quarter 1990 as a result of lower net returns to producers during the last half of 1989. The August-September broiler chick hatch indicates a 6-percent increase in fourth-quarter production, below the 10-percent increase of a year earlier.

### Slower Growth Expected Next Year

Relatively lower net returns and lower broiler prices in 1990 are expected to influence broiler producers to slow expansion to a 5 to 6-percent increase in 1991. The broiler hatchery supply flock for April 1991, estimated by adding the broiler-type pullet placements to the hatchery supply 7-14

Figure 3

## Broiler production and Consumption trends



1990 and 1991 Estimated

months earlier, is expected to be up 6 percent from a year ago, compared with 9 percent in April 1990. This is an indication of producer intentions to slow expansion next year.

### Large Supplies Pressure Broiler Prices

Broiler prices in 1990 continue to be pressured by heavy production. Fourth-quarter broiler prices are expected to average about the same or slightly lower than a year ago. Larger supplies are becoming available when consumer interests typically focus on turkeys and hams for the approaching holidays. Wholesale broiler prices for the fourth quarter will likely average 48-50 cents per pound, receiving some support from high red meat prices and high broiler exports. For 1990, the 12-city price for broilers is expected to average 54-55 cents per pound, below the 59 cents in 1989.

Fourth-quarter retail prices for whole broilers are estimated to average 5 percent below a year ago, at around 82-88 cents

Table 7--Broiler chicks hatched and pullet chicks placed in hatchery supply flocks, 1988-91

| Month     | Broiler-type chicks |         |         | Pullet chicks placed in broiler hatchery supply flocks |       |       |                          |        |        |
|-----------|---------------------|---------|---------|--|-------|-------|--------------------------|--------|--------|
|           |                     |         |         | Monthly placements                                     |       |       | Cumulative placements 1/ |        |        |
|           | 1988                | 1989    | 1990    | 1988   | 1989  | 1990  | 1989                     | 1990   | 1991   |
|           | Thousands           |         |         |  |       |       |                          |        |        |
| January   | 468,333             | 482,802 | 516,289 | 3,593  | 3,982 | 4,587 | 32,512                   | 34,352 | 37,096 |
| February  | 432,813             | 443,923 | 472,853 | 4,186  | 4,173 | 4,340 | 32,484                   | 34,764 | 37,526 |
| March     | 483,353             | 503,506 | 543,088 | 4,616  | 4,662 | 4,924 | 32,566                   | 35,277 | 37,708 |
| April     | 464,386             | 494,911 | 535,827 | 4,019  | 4,385 | 4,592 | 33,046                   | 35,882 | 38,011 |
| May       | 487,027             | 524,170 | 553,689 | 4,274  | 4,535 | 5,089 | 33,150                   | 36,416 |        |
| June      | 473,782             | 510,554 | 540,923 | 3,944  | 4,528 | 5,134 | 32,327                   | 35,762 |        |
| July      | 473,394             | 513,035 | 541,028 | 3,735  | 4,205 | 4,438 | 32,602                   | 35,799 |        |
| August    | 479,734             | 510,272 | 540,814 | 4,199  | 4,807 | 4,604 | 32,310                   | 35,851 |        |
| September | 455,183             | 485,067 | 508,575 | 4,073  | 4,587 | 4,890 | 32,539                   | 35,663 |        |
| October   | 456,819             | 484,375 |         | 4,290  | 4,707 |       | 33,466                   | 36,382 |        |
| November  | 438,543             | 469,641 |         | 3,793  | 4,008 |       | 33,652                   | 36,167 |        |
| December  | 489,033             | 522,093 |         | 4,294  | 4,422 |       | 34,114                   | 36,669 |        |

1/ 7-14 months earlier.



Table 8--Broilers: Eggs set and chicks placed weekly 1/

| Date   | Eggs set        |         |         | Chicks placed   |         |         |
|--------|-----------------|---------|---------|-----------------|---------|---------|
|        | 1989            | 1990    | Change  | 1989            | 1990    | Change  |
|        | ---Thousands--- |         | Percent | ---Thousands--- |         | Percent |
| Jan. 6 | 124,403         | 129,684 | 4.2     | 96,864          | 105,543 | 9.0     |
| 13     | 120,643         | 131,418 | 8.9     | 90,045          | 104,388 | 5.4     |
| 20     | 123,496         | 130,653 | 5.8     | 99,381          | 104,199 | 4.9     |
| 27     | 126,112         | 130,967 | 3.9     | 99,072          | 104,358 | 5.3     |
| Feb. 3 | 126,744         | 130,429 | 2.9     | 96,080          | 105,663 | 10.0    |
| 10     | 126,765         | 130,971 | 3.3     | 97,707          | 105,123 | 7.6     |
| 17     | 127,243         | 134,086 | 5.4     | 99,782          | 105,027 | 5.3     |
| 24     | 128,075         | 135,441 | 5.8     | 101,249         | 105,387 | 4.1     |
| Mar. 3 | 127,826         | 136,247 | 6.6     | 100,717         | 105,774 | 5.0     |
| 10     | 128,265         | 136,950 | 6.8     | 100,747         | 107,839 | 7.0     |
| 17     | 128,374         | 137,032 | 6.7     | 102,375         | 109,535 | 7.0     |
| 24     | 127,718         | 136,015 | 6.5     | 102,930         | 110,082 | 7.0     |
| Apr. 1 | 130,024         | 138,522 | 6.5     | 102,307         | 111,603 | 9.1     |
| 7      | 131,186         | 139,539 | 6.4     | 101,915         | 110,871 | 8.8     |
| 14     | 131,033         | 139,943 | 6.8     | 102,991         | 109,804 | 6.6     |
| 21     | 131,451         | 140,070 | 6.6     | 103,774         | 111,131 | 7.1     |
| 28     | 130,914         | 133,708 | 2.1     | 105,073         | 112,775 | 7.3     |
| May 5  | 130,983         | 136,094 | 3.9     | 105,878         | 111,629 | 5.4     |
| 12     | 131,375         | 138,198 | 5.2     | 105,571         | 112,866 | 6.9     |
| 19     | 132,893         | 138,526 | 4.2     | 105,434         | 107,519 | 2.0     |
| 26     | 132,360         | 140,238 | 5.9     | 106,010         | 110,604 | 4.3     |
| June 2 | 134,048         | 139,080 | 3.8     | 105,914         | 111,510 | 5.3     |
| 9      | 133,498         | 139,023 | 3.1     | 106,408         | 111,556 | 4.8     |
| 16     | 133,040         | 139,681 | 5.0     | 105,951         | 112,361 | 6.1     |
| 23     | 133,091         | 136,813 | 2.8     | 107,465         | 111,667 | 3.9     |
| July 1 | 124,691         | 127,627 | 2.4     | 106,809         | 111,632 | 4.5     |
| 7      | 128,854         | 136,961 | 6.3     | 106,778         | 112,122 | 5.0     |
| 14     | 129,364         | 136,115 | 5.2     | 106,879         | 110,096 | 3.0     |
| 21     | 129,599         | 135,684 | 4.7     | 100,202         | 101,601 | 1.4     |
| 28     | 129,853         | 135,282 | 4.2     | 103,609         | 109,193 | 5.4     |
| Aug. 4 | 128,195         | 135,001 | 5.3     | 103,461         | 108,566 | 4.9     |
| 11     | 129,368         | 134,668 | 4.1     | 103,274         | 108,951 | 5.5     |
| 18     | 129,466         | 136,772 | 5.6     | 103,864         | 107,884 | 3.9     |
| 25     | 129,235         | 135,725 | 5.0     | 102,726         | 108,360 | 5.5     |
| Sep. 1 | 126,637         | 130,903 | 3.4     | 103,222         | 107,878 | 4.5     |
| 8      | 123,091         | 126,894 | 3.1     | 104,214         | 109,307 | 4.9     |
| 15     | 115,815         | 120,587 | 4.1     | 104,346         | 108,575 | 4.1     |
| 22     | 121,498         | 126,528 | 4.1     | 101,491         | 104,194 | 2.7     |
| 29     | 127,662         | 131,405 | 2.9     | 97,575          | 99,561  | 2.0     |
| Oct. 6 | 127,639         | 128,984 | 1.1     | 91,853          | 95,737  | 4.2     |
| 13     | 122,515         | 127,868 | 4.4     | 96,765          | 100,448 | 3.8     |
| 20     | 117,414         | 116,487 | -0.8    | 101,737         | 106,259 | 4.4     |
| 27     | 118,293         | 120,720 | 2.1     | 102,406         | 104,587 | 2.1     |
| Nov. 3 | 127,373         | 129,737 | 1.9     | 98,248          | 101,616 | 3.4     |
| 10     | 132,137         | 135,570 | 2.6     | 93,491          | 93,456  | 0.0     |

1/ 15 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., S.C., Tenn., Tex., Va., and W. Va.

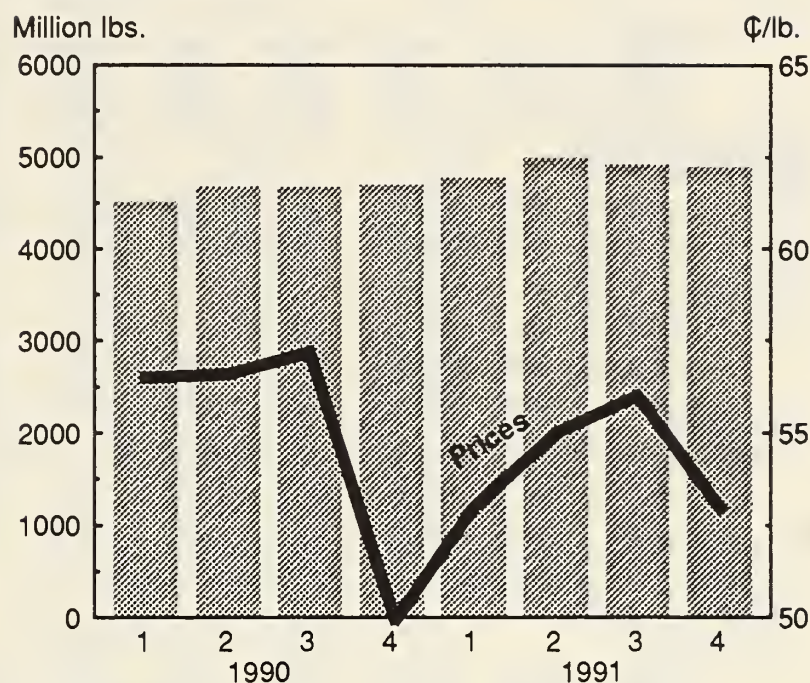
per pound. Retail prices for 1990 are expected to average in the high 80's, down from 93 cents in 1989.

### Broiler Prices Unchanged in 1991

Wholesale prices for broilers in 1991 are estimated to average near 1990 levels, reflecting the slower anticipated growth for next year. Some support will probably come from continued high red meat prices. Retail prices for whole

Figure 4

### Broiler production and prices 1990 and 1991 estimates



FI, RTC Basis

broilers are expected to average about the same as in 1990. Per capita broiler consumption is estimated to increase around 5 percent, from almost 70 pounds in 1990 to slightly over 73 in 1991.

### 1990 Net Returns Are Lower

Net returns to broiler producers are expected to remain positive for 1990, but probably will average slightly below a year ago. Lower soybean meal prices in 1990 has offset year-over-year increases in corn prices thus far, and most likely for the rest of the year. Average feed costs per pound of broiler will decline 2-3 cents in 1990, limiting any significant drop in average net returns this year, even with relatively lower broiler prices in 1990. Fourth-quarter net returns are forecast to average about the same as last year, around 2-3 cents per pound. Average net returns for 1990 are estimated around 8-9 cents per pound, slightly below 9.7 cents in 1989.

### Positive Net Returns Expected in 1991

Net returns to broiler producers are expected to continue positive in 1991. The average corn and soybean meal prices in 1991 are estimated to be about the same as in 1990. With feed cost and broiler prices near the 1990 levels, average net returns to producers are expected to approximate 1990's 8-9 cents per pound.

### Eggs

#### Small Production Increase Expected for 1990

Egg production increases for 1990 have been lower than earlier anticipated. Total egg production will likely be up just



Table 9--Young chicken prices and price spreads

| Item                           | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Avg.  |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Cents/lb.                      |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Farm price 1/:                 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                           | 31.0  | 30.0  | 29.0  | 29.2  | 29.9  | 27.6  | 27.6  | 31.7  | 27.8  | 25.1  | 26.3  | 24.5  | 28.3  |
| 1988                           | 26.8  | 25.9  | 27.4  | 28.3  | 33.7  | 37.4  | 41.5  | 42.3  | 39.1  | 35.7  | 34.8  | 35.4  | 34.0  |
| 1989                           | 34.6  | 34.7  | 38.6  | 39.1  | 44.6  | 42.2  | 38.7  | 35.7  | 36.1  | 30.2  | 29.4  | 28.6  | 36.0  |
| 1990                           | 30.7  | 33.5  | 36.4  | 33.2  | 35.2  | 34.1  | 36.9  | 33.2  | 35.2  | 29.0  |       |       |       |
| Wholesale RTC                  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 12-city avg. 2/:               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                           | 51.8  | 49.8  | 48.5  | 48.6  | 50.5  | 45.5  | 47.0  | 52.6  | 46.4  | 43.2  | 44.6  | 39.8  | 47.4  |
| 1988                           | 43.9  | 44.9  | 48.4  | 48.7  | 56.6  | 61.5  | 66.5  | 68.9  | 62.8  | 57.7  | 57.1  | 58.8  | 56.3  |
| 1989                           | 58.0  | 58.0  | 62.1  | 63.5  | 70.4  | 67.4  | 62.0  | 57.3  | 59.9  | 51.7  | 49.2  | 48.4  | 59.0  |
| 1990                           | 51.7  | 57.4  | 60.4  | 55.3  | 57.9  | 56.4  | 59.5  | 54.9  | 57.4  | 48.8  |       |       |       |
| U.S. avg. retail price:        |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                           | 82.1  | 83.2  | 80.4  | 79.2  | 78.2  | 77.1  | 75.5  | 78.5  | 79.3  | 79.1  | 75.6  | 73.6  | 78.5  |
| 1988                           | 74.0  | 74.5  | 75.3  | 76.0  | 79.6  | 86.8  | 93.7  | 96.1  | 97.5  | 93.2  | 89.2  | 88.5  | 85.4  |
| 1989                           | 90.5  | 89.9  | 91.3  | 93.2  | 96.1  | 98.2  | 96.4  | 95.4  | 94.2  | 91.0  | 87.9  | 88.3  | 92.7  |
| 1990                           | 88.2  | 89.6  | 92.8  | 89.7  | 90.2  | 92.8  | 91.7  | 91.2  | 90.7  |       |       |       |       |
| Price spreads retail-to-cons.: |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                           | 24.3  | 26.8  | 25.2  | 25.3  | 21.2  | 18.7  | 21.2  | 20.2  | 33.1  | 30.2  | 25.2  | 26.1  | 24.8  |
| 1988                           | 23.7  | 24.4  | 21.6  | 20.5  | 16.5  | 18.0  | 22.8  | 21.9  | 29.9  | 28.8  | 26.7  | 24.1  | 23.2  |
| 1989                           | 27.3  | 28.6  | 24.9  | 29.4  | 20.2  | 25.1  | 27.7  | 30.9  | 29.4  | 33.1  | 32.0  | 33.6  | 28.5  |
| 1990                           | 30.5  | 27.0  | 29.0  | 29.4  | 26.5  | 30.5  | 24.9  | 30.4  | 27.9  |       |       |       |       |
| 1982-84 = 100                  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Retail pr. index wh. chickens: |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987                           | 119.5 | 118.7 | 115.2 | 113.1 | 112.9 | 111.6 | 109.9 | 113.9 | 114.6 | 113.0 | 109.2 | 107.7 | 113.3 |
| 1988                           | 107.9 | 109.5 | 110.3 | 111.6 | 117.4 | 125.9 | 137.4 | 140.1 | 142.0 | 136.0 | 131.7 | 131.0 | 125.1 |
| 1989                           | 133.7 | 133.2 | 135.6 | 138.0 | 142.9 | 144.7 | 141.7 | 140.8 | 139.1 | 134.9 | 130.4 | 130.4 | 137.1 |
| 1990                           | 131.5 | 133.6 | 138.4 | 134.9 | 134.8 | 138.2 | 137.6 | 136.7 | 136.3 |       |       |       |       |

1/ Liveweight. 2/ 12-city composite weighted average.

Table 10--Poultry and eggs costs and returns 1/

| Year                    | Production costs |       | Wholesale      |          | Net returns |
|-------------------------|------------------|-------|----------------|----------|-------------|
|                         | Feed             | Total | Total costs 2/ | Price 3/ |             |
| Market eggs (cents/doz) |                  |       |                |          |             |
| 1989:                   |                  |       |                |          |             |
| I                       | 32.8             | 51.0  | 71.5           | 82.8     | 11.3        |
| II                      | 32.2             | 50.4  | 70.9           | 76.1     | 5.2         |
| III                     | 31.0             | 49.2  | 69.7           | 85.2     | 15.5        |
| IV                      | 28.3             | 47.0  | 67.0           | 96.1     | 28.6        |
| Year                    | 31.2             | 49.4  | 69.9           | 85.1     | 15.2        |
| 1990:                   |                  |       |                |          |             |
| I                       | 27.6             | 45.9  | 66.3           | 90.8     | 24.4        |
| II                      | 29.6             | 47.8  | 68.3           | 76.8     | 8.6         |
| III                     | 30.0             | 48.2  | 68.7           | 79.3     | 10.6        |
| IV                      |                  |       |                |          |             |
| Year                    |                  |       |                |          |             |
| Broilers (cents/lb)     |                  |       |                |          |             |
| 1989:                   |                  |       |                |          |             |
| I                       | 19.1             | 27.1  | 50.6           | 59.5     | 8.9         |
| II                      | 18.6             | 26.6  | 49.9           | 67.3     | 17.4        |
| III                     | 18.2             | 26.2  | 49.4           | 59.6     | 10.2        |
| IV                      | 16.8             | 24.8  | 47.5           | 49.8     | 2.3         |
| Year                    | 18.2             | 26.2  | 49.4           | 59.0     | 9.7         |
| 1990:                   |                  |       |                |          |             |
| I                       | 15.7             | 23.7  | 46.0           | 56.5     | 10.5        |
| II                      | 15.8             | 23.8  | 46.1           | 56.6     | 10.5        |
| III                     | 16.8             | 24.8  | 47.4           | 57.2     | 9.7         |
| IV                      |                  |       |                |          |             |
| Year                    |                  |       |                |          |             |
| Turkeys (cents/lb)      |                  |       |                |          |             |
| 1989:                   |                  |       |                |          |             |
| I                       | 27.9             | 41.6  | 68.3           | 61.6     | -6.7        |
| II                      | 27.5             | 41.2  | 67.8           | 71.3     | 3.5         |
| III                     | 26.4             | 40.1  | 66.4           | 64.5     | -1.9        |
| IV                      | 25.4             | 39.1  | 65.2           | 66.0     | 0.8         |
| Year                    | 26.7             | 40.4  | 66.8           | 66.0     | -0.8        |
| 1990:                   |                  |       |                |          |             |
| I                       | 23.1             | 36.8  | 62.3           | 55.6     | -6.7        |
| II                      | 22.5             | 36.2  | 61.5           | 61.6     | 0.0         |
| III                     | 24.2             | 37.9  | 63.6           | 66.7     | 3.1         |
| IV                      |                  |       |                |          |             |
| Year                    |                  |       |                |          |             |

1/ Estimated costs and prices are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 12-metro egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb young hens and 14-22 lb toms in Central, Western and Eastern Regions.

Table 11--Layers on farms and eggs produced, 1988-89 1/

| Quar-<br>ters | Number of layer |         | Eggs per layer |         | Eggs produced |         |
|---------------|-----------------|---------|----------------|---------|---------------|---------|
|               | 1989            | 1990 2/ | 1989           | 1990 2/ | 1989          | 1990 2/ |
| - Million -   |                 |         |                |         |               |         |
| I             | 272             | 271     | 61.5           | 61.3    | 1,394.4       | 1,385.2 |
| II            | 268             | 271     | 63.4           | 63.7    | 1,417.1       | 1,437.6 |
| III           | 266             | 267     | 62.8           | 63.5    | 1,393.2       | 1,412.2 |
| IV            | 268             |         | 62.0           |         | 1,383.8       |         |
| Annual        | 269             |         | 249.7          |         | 5,588.5       |         |

1/ Marketing year beginning December 1. 2/ Preliminary.

over 1 percent for both the year and for the fourth quarter. Most of the increases are in hatching eggs used in the broiler industry. Table-egg production is expected to increase fractionally for the year, and fourth-quarter production is also expected to increase less than one percent. Producers have kept the average table-egg flock size generally below year-earlier levels throughout the year, in spite of the favorable returns, which typically encourages flock expansion. The table-egg-type flock on October 1, at 228.4 million layers, was up almost 1 percent over September, but down fractionally from year-earlier levels. Egg-type chicks hatched, while up 6 percent for January-September, fell in August and September to levels about even with a year earlier, indicating no plans for major flock expansion in 1991.

### Egg Prices Strong, but Below Year Ago

Wholesale prices for large eggs moved above year-earlier levels in late September but have plateaued and are expected to remain below year-earlier levels for the remainder of the year. Fourth-quarter prices for wholesale grade A, large



Table 12--Force Moltings and Light-type hen slaughter

| Month     | Force molt layers 1/ |         |         |                |         |         | Light-type hens slaughtered under Federal inspection |        |        |
|-----------|----------------------|---------|---------|----------------|---------|---------|--|--------|--------|
|           | Being molted         |         |         | Molt completed |         |         |  |        |        |
|           | 1988 2/              | 1989 2/ | 1990 3/ | 1988 2/        | 1989 2/ | 1990 3/ | 1988   | 1989   | 1990   |
|           | Percent              |         |         |                |         |         | Thousands  |        |        |
| January   | 3.8                  | 4.1     | 3.0     | 20.8           | 23.9    | 21.5    | 13,574   | 12,219 | 11,500 |
| February  | 5.0                  | 4.9     | 5.5     | 20.3           | 21.5    | 20.9    | 14,647   | 11,819 | 9,740  |
| March     | 3.8                  | 4.3     | 4.1     | 20.5           | 21.7    | 21.7    | 15,312   | 13,645 | 11,586 |
| April     | 3.9                  | 3.9     | 1.9     | 19.3           | 21.5    | 22.0    | 15,034   | 10,528 | 13,622 |
| May       | 5.9                  | 5.3     | 4.8     | 18.6           | 21.4    | 19.9    | 14,107   | 11,868 | 13,159 |
| June      | 7.6                  | 5.6     | 4.3     | 19.9           | 21.7    | 20.0    | 13,157   | 10,316 | 11,805 |
| July      | 6.0                  | 4.9     | 3.8     | 21.2           | 21.7    | 20.7    | 8,601  | 10,194 | 10,786 |
| August    | 4.3                  | 4.0     | 4.0     | 22.4           | 22.7    | 20.6    | 10,555   | 10,871 | 11,487 |
| September | 4.3                  | 2.5     | 3.4     | 22.4           | 23.0    | 20.9    | 9,119  | 10,777 | 8,989  |
| October   | 4.5                  | 4.3     | 3.7     | 22.3           | 22.9    | 21.0    | 10,136   | 10,459 |        |
| November  | 3.9                  | 4.6     |         | 22.6           | 23.5    |         | 11,092   | 9,255  |        |
| December  | 3.5                  | 2.7     |         | 24.1           | 23.9    |         | 13,444   | 11,307 |        |

1/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service.  
 2/ Percent of hens and pullets of laying age in 15 selected States. 3/ Percent of hens and pullets of laying age in 20 selected States.

Table 13--Egg-type chick hatchery operations

| Month | Hatch     |        |        | Eggs in incubators 1/ |      |      |
|-------|-----------|--------|--------|-----------------------|------|------|
|       | 1988      | 1989   | 1990   | 1988                  | 1989 | 1990 |
|       | Thousands |        |        | Percent               |      |      |
| Jan.  | 29,274    | 26,655 | 32,048 | -4                    | -20  | 28   |
| Feb.  | 28,433    | 27,365 | 32,248 | -24                   | 2    | 23   |
| Mar.  | 35,615    | 32,577 | 36,407 | -17                   | -15  | 26   |
| Apr.  | 34,749    | 36,133 | 37,207 | -16                   | 4    | 6    |
| May   | 35,984    | 38,513 | 37,706 | -17                   | 3    | 3    |
| June  | 33,049    | 34,708 | 34,499 | -6                    | -2   | -4   |
| July  | 24,876    | 29,814 | 31,696 | -24                   | 16   | -1   |
| Aug.  | 27,838    | 32,817 | 33,039 | -23                   | 17   | 0    |
| Sept. | 30,918    | 32,850 | 32,724 | -5                    | 4    | 5    |
| Oct.  | 31,007    | 33,298 |        | -11                   | 7    | -2   |
| Nov.  | 29,425    | 29,662 |        | -1                    | -4   |      |
| Dec.  | 27,181    | 29,284 |        | -11                   | 11   |      |

1/ First of the month, percent change from previous year.

eggs in New York are expected to average around 85 cents per dozen, reflecting seasonal strength associated with holiday baking and cooking.

The supply of cartoned eggs is being impacted, at least momentarily, by restrictions placed on some large midwest flocks because of eggs infected with *Salmonella enteritidis*. One consequence has been the diversion, since early October, of eggs produced by a 2.3 million bird complex from the shell-egg market to the breaker egg market or to storage. Potentially, additional flocks may be restricted, pending the results of an investigation by the USDA *Salmonella Enteritidis* Task Force. Some of the eggs that had been earlier restricted and placed in cold storage have recently been cleared for sale in the table-egg market. These eggs come from flocks free of *Salmonella enteritidis* but that were located within the same complex as infected flocks, and thus initially restricted. If there is a large movement from storage to the table-egg market of such eggs, fourth quarter egg prices may be pushed lower.

#### Positive Net Returns Expected To Continue

Thus far, average net returns have been positive for all of 1990, although second-half returns are below the very high

levels of a year earlier. Returns are expected to remain positive for the rest of the year and average around 15 cents per dozen, about the same as in 1989.

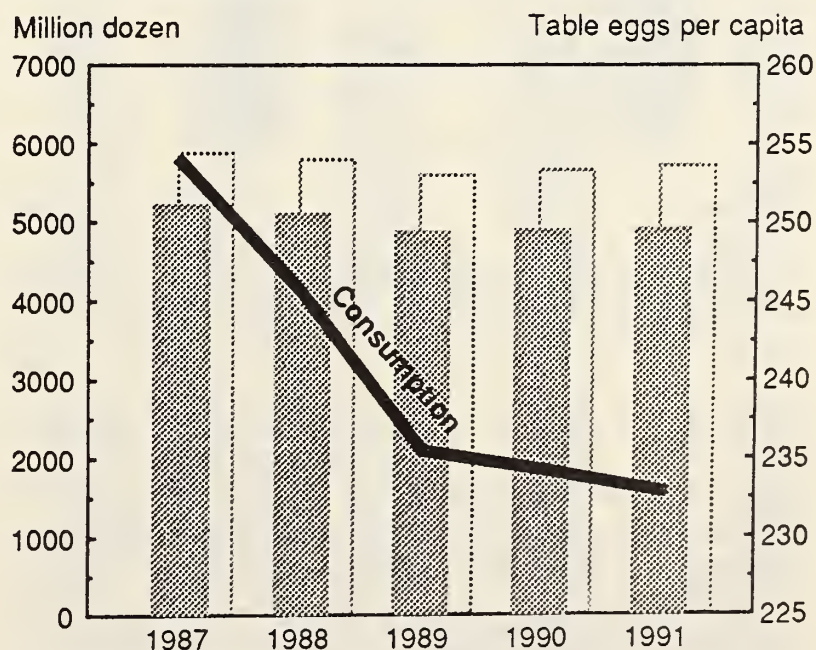
Egg producers can expect positive net returns in 1991 for the third consecutive year. However, returns will be lower, reflecting expected lower egg prices, and feed costs about the same as in 1990.

#### Small Production Increase in 1991

Total egg production for 1991 is estimated to be around 1 percent greater than in 1990. Table egg producers continue to expand slowly in response to the favorable net returns experienced in 1989 and 1990. Hatching egg production will increase in support of the expected expansion in the broiler industry. The table-egg-laying flock size in 1991 is

Figure 5

#### Total eggs and table eggs Production and consumption, 1987-1991



1990 and 1991 Estimated



Table 14--Egg prices and price spreads

| Item  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Avg.  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Cents/doz.  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Farm price 1/:                                      |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987  | 51.7  | 50.1  | 46.0  | 45.8  | 39.5  | 40.3  | 40.8  | 40.5  | 49.7  | 40.9  | 45.4  | 38.7  | 44.1  |
| 1988  | 39.1  | 36.9  | 40.0  | 35.8  | 33.0  | 36.3  | 49.5  | 50.1  | 56.0  | 50.6  | 51.7  | 53.2  | 44.4  |
| 1989  | 55.8  | 53.8  | 73.3  | 58.0  | 54.1  | 55.5  | 56.7  | 64.5  | 64.2  | 64.2  | 73.1  | 77.6  | 62.6  |
| 1990  | 78.8  | 63.1  | 73.1  | 64.2  | 51.2  | 54.2  | 46.6  | 58.2  | 61.6  | 66.5  |       |       |       |
| New York (cartoned)                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Grade A, large 2/:                                  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987  | 67.1  | 65.2  | 62.0  | 62.4  | 55.6  | 58.7  | 59.1  | 63.2  | 68.3  | 60.2  | 60.5  | 56.9  | 61.6  |
| 1988  | 55.9  | 52.7  | 56.4  | 52.1  | 50.9  | 56.8  | 73.6  | 69.5  | 75.6  | 66.0  | 65.3  | 70.4  | 62.1  |
| 1989  | 72.0  | 71.1  | 92.2  | 76.6  | 73.7  | 75.2  | 76.5  | 84.2  | 83.8  | 84.8  | 93.4  | 99.6  | 82.0  |
| 1990  | 92.4  | 79.6  | 91.5  | 82.4  | 67.9  | 73.6  | 70.9  | 80.3  | 82.2  | 86.5  |       |       |       |
| 4-Region average,<br>Grade A, large<br>retail price |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987  | 86.2  | 82.3  | 80.0  | 78.6  | 76.3  | 71.1  | 76.3  | 73.0  | 83.7  | 77.8  | 80.5  | 73.1  | 78.3  |
| 1988  | 76.0  | 71.8  | 74.0  | 71.9  | 67.8  | 70.5  | 80.3  | 90.9  | 87.4  | 89.6  | 83.9  | 83.3  | 79.0  |
| 1989  | 94.1  | 89.0  | 103.1 | 99.7  | 95.6  | 93.7  | 96.1  | 98.3  | 103.8 | 102.3 | 108.0 | 113.7 | 99.8  |
| 1990  | 122.3 | 104.1 | 111.1 | 109.2 | 94.0  | 93.0  | 89.9  | 95.4  | 94.6  |       |       |       |       |
| Price spreads<br>retail-to-consumer:                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987  | 17.4  | 14.5  | 16.5  | 15.3  | 20.8  | 12.7  | 16.4  | 15.7  | 13.6  | 18.4  | 18.4  | 15.4  | 16.3  |
| 1988  | 19.0  | 18.2  | 14.9  | 20.0  | 16.5  | 13.0  | 7.0   | 20.5  | 11.2  | 22.0  | 16.0  | 10.1  | 15.7  |
| 1989  | 18.2  | 18.6  | 10.2  | 23.1  | 21.2  | 17.2  | 18.3  | 12.1  | 16.7  | 16.0  | 12.3  | 12.7  | 16.4  |
| 1990  | 26.7  | 22.1  | 16.8  | 24.3  | 24.0  | 17.2  | 16.9  | 14.5  | 12.9  |       |       |       |       |
| 1982-84 = 100                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Consumer price index:                               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1987  | 100.8 | 97.8  | 93.9  | 91.1  | 88.5  | 84.1  | 87.8  | 85.8  | 97.6  | 91.4  | 93.9  | 85.5  | 91.5  |
| 1988  | 90.1  | 85.5  | 87.9  | 85.0  | 81.8  | 83.6  | 95.1  | 104.2 | 103.1 | 105.5 | 101.2 | 99.6  | 93.6  |
| 1989  | 112.0 | 106.1 | 122.9 | 117.6 | 112.6 | 110.6 | 112.8 | 115.2 | 124.6 | 122.9 | 129.4 | 134.9 | 118.5 |
| 1990  | 143.9 | 124.7 | 131.6 | 130.3 | 115.0 | 112.2 | 109.1 | 119.6 | 120.6 |       |       |       |       |

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982. 2/ Price to volume buyers.

expected to increase only slightly from 1990, as reflected in the increases in egg-type chicks hatched and increases in the cumulative egg-type hatch 7-18 months earlier. Culling rates and molting decisions will also impact flock size.

Table 15--Shell eggs broken and egg products produced under Federal inspection

| Period    | Shell<br>eggs<br>broken<br><br>Thousand<br>dozen | Egg products produced 1/<br>Thousand pound |         |         |
|-----------|--|--|---------|---------|
|           |  | Liquid                                     | Frozen  | Dried   |
| 1989:     |  |  |         |         |
| January   | 79,780   | 28,584                                     | 29,255  | 10,208  |
| February  | 69,829   | 26,991                                     | 25,612  | 9,392   |
| March     | 69,998   | 31,581                                     | 25,136  | 7,764   |
| April     | 76,547   | 29,355                                     | 29,153  | 8,865   |
| May       | 91,081   | 32,678                                     | 34,600  | 10,091  |
| June      | 89,658   | 31,996                                     | 33,306  | 10,067  |
| July      | 81,260   | 28,762                                     | 30,521  | 9,192   |
| August    | 86,929   | 34,053                                     | 34,325  | 8,620   |
| September | 76,896   | 33,170                                     | 29,094  | 7,715   |
| October   | 82,369   | 37,743                                     | 31,738  | 8,368   |
| November  | 76,864   | 36,989                                     | 28,864  | 7,350   |
| December  | 67,770   | 31,205                                     | 27,091  | 6,753   |
| Total     | 948,981  | 383,107                                    | 358,695 | 104,385 |
| 1990:     |  |  |         |         |
| January   | 81,158   | 37,182                                     | 30,282  | 8,204   |
| February  | 75,303   | 33,657                                     | 29,998  | 7,834   |
| March     | 84,119   | 39,976                                     | 33,951  | 8,718   |
| April     | 80,647   | 35,311                                     | 30,582  | 8,440   |
| May       | 95,078   | 41,162                                     | 36,587  | 11,073  |
| June      | 92,228   | 37,716                                     | 32,672  | 10,067  |
| July      | 94,525   | 37,339                                     | 36,391  | 19,760  |
| August    | 96,450   | 40,629                                     | 34,151  | 9,925   |
| September | 83,822   | 37,138                                     | 31,546  | 7,536   |

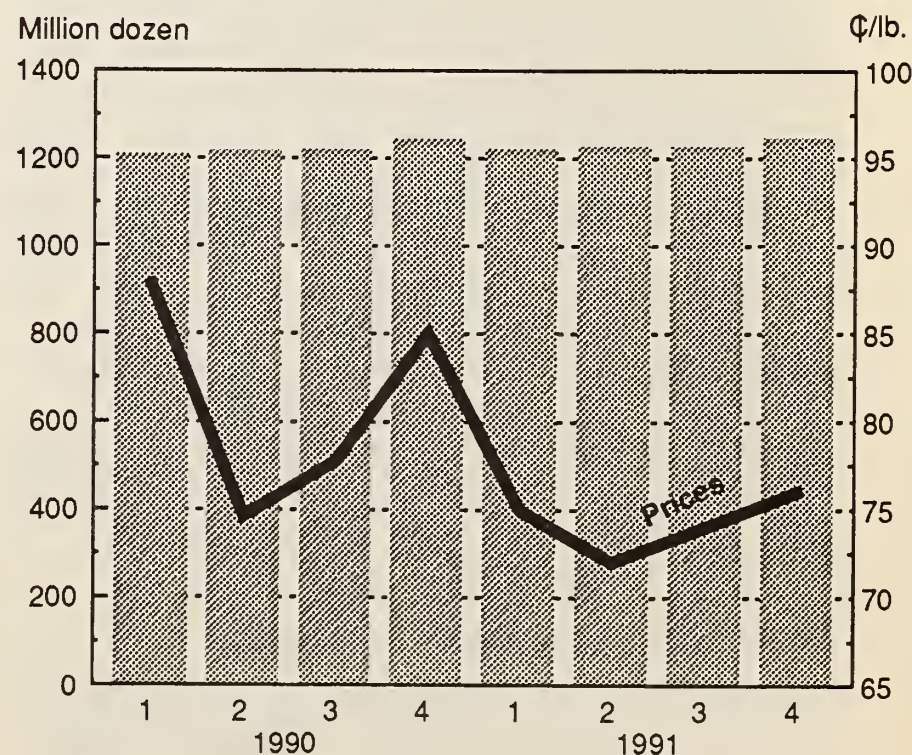
1/ Includes ingredients added. 2/ Liquid egg products produced for immediate consumption.

### Prices To Be Lower, Small Decline in Per Capita Consumption

Wholesale prices in 1991 are expected to average 71-77 cents per dozen, below the expected 1990 average of around 81 cents. Average retail prices are expected in the mid-80's, down sharply from 99 cents per dozen in 1990. Per capita consumption will be down only slightly in 1991, to around

Figure 6

### Table egg production and prices 1990 and 1991 estimates





233 eggs. This is down about one egg from 1990 levels and 2 eggs from the 235 per capita consumption in 1989. These decreases are far less dramatic than those experienced in 1988 and 1989. Egg product usage, which is up around 9 percent for the year, plays an important role in total egg consumption.

## U.S. Poultry Trade

### Broiler Exports Another Record in 1990

U.S. broiler exports will increase about 35 percent in 1990, to a record 1 billion pounds. This will be equal to about 6 percent of U.S. production, about matching the 6 percent high of 1981. This year's sharp growth is almost entirely due to large sales of over 300 million pounds of leg parts to the USSR, which has become the leading market. Sales to Japan, about 220 million pounds, will be about the same as in 1989. Sales continue to increase to Hong Kong and most other countries in the Pacific, but are expected to decline to Singapore. In neighboring-country markets, exports are expected to be up to Canada but down slightly to Mexico, which is experiencing increased production over supplies. Exports are down to Jamaica but have increased to other Car-

Table 16--U.S. broiler exports to major importers,

| Country or area      | January - August |         |
|----------------------|------------------|---------|
|                      | 1989             | 1990    |
|                      | 1000 lb.         |         |
| U.S.S.R.             | 0                | 193,779 |
| Japan                | 150,249          | 142,206 |
| Hong Kong            | 92,701           | 117,544 |
| Mexico               | 63,663           | 55,242  |
| Canada               | 46,525           | 52,796  |
| Singapore            | 41,691           | 32,353  |
| Romania              | 0                | 26,466  |
| Jamaica              | 38,298           | 17,063  |
| Spain                | 6,072            | 10,998  |
| Saudi Arabia         | 2,369            | 10,011  |
| Netherlands Antilles | 7,210            | 8,059   |
| St. Lucia            | 5,174            | 6,688   |
| Other                | 63,762           | 82,061  |
| Grand Total          | 517,714          | 755,266 |

Table 17--U.S. mature chicken exports to major importers

| Country or area      | January - August |        |
|----------------------|------------------|--------|
|                      | 1989             | 1990   |
|                      | 1000 lb.         |        |
| Canada               | 1,738            | 5,915  |
| Netherlands Antilles | 2,531            | 3,134  |
| St. Lucia            | 2,000            | 1,757  |
| Antigua              | 767              | 1,319  |
| Mexico               | 3,146            | 813    |
| Japan                | 114              | 591    |
| St. Christ-Nevis     | 587              | 536    |
| Hong Kong            | 24               | 460    |
| Bahamas              | 112              | 437    |
| St. Vincent          | 114              | 348    |
| Singapore            | 31               | 342    |
| Other                | 3,415            | 2,796  |
| Grand Total          | 14,579           | 18,448 |

Figure 7

### U.S. broiler exports Increasing in volume

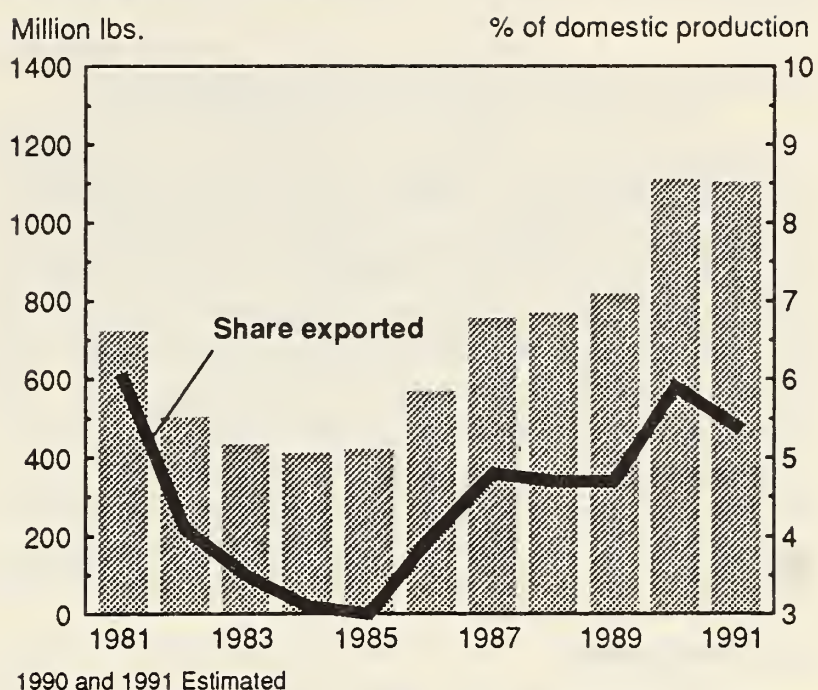
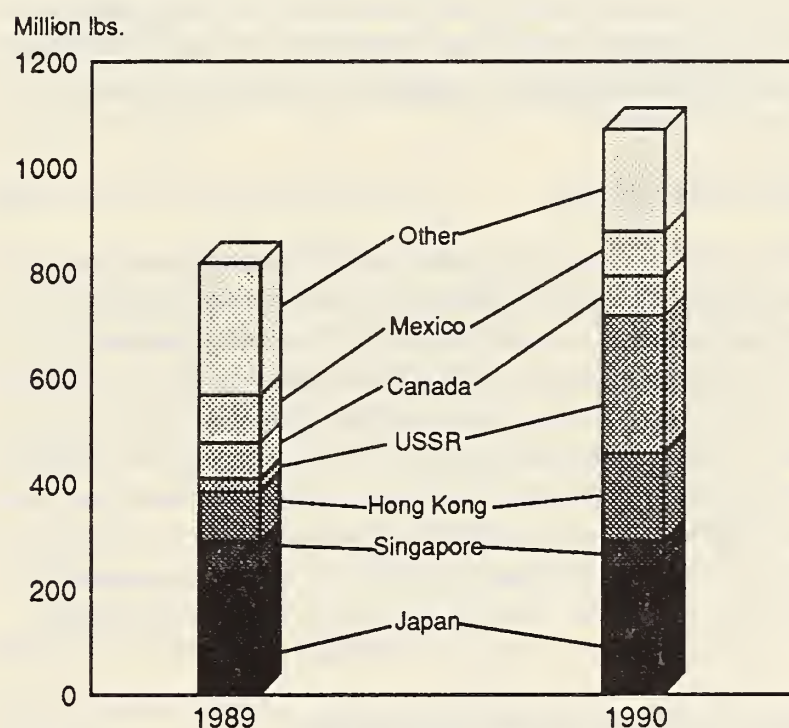


Figure 8

### U.S. broiler exports



ibbean countries. Exports are higher to the Middle East, assisted by the Export Enhancement Program (EEP) and also to the Canary Islands.

### Parts Dominate Exports

The major factors in the export upswing are relatively large and reliable U.S. supplies at attractive prices, particularly for dark meat parts, together with the USSR efforts to increase meat supplies for consumers. Broiler parts at over 95 percent of the total, continue to dominate exports but the whole bird share is up slightly this year. Whole bird exports are up



sharply to Japan, Canada and the Middle East. Whole bird exports to Jamaica have fallen sharply, as local production has recovered from the hurricane damage incurred in late 1988.

#### ***Total Value of Broiler Exports To Exceed \$500 Million***

The value of exports in 1990 is estimated to exceed \$500 million compared with about \$400 million in 1989. Japan will continue to be the highest valued market at \$120-125 million followed by the USSR at \$100 to \$105 million, Hong Kong at \$75 million and Canada at \$65 million. The average unit value of broiler exports is running at 47 cents per pound and below last year mainly because of low-priced sales to the USSR. Whole birds are also lower at 53 cents. Average values to Japan at 56 cents are also slightly below last year as they are to Hong Kong and Mexico. Average unit values to Canada, usually a high-valued market, they are higher at 80 cents per pound.

#### ***The USSR Market***

All U.S. exports to the USSR have been leg quarters. However, future exports will likely include whole birds and other chicken products. Chicken meat production in the USSR increased only slightly in 1990 and its imports of broilers from all countries rose about 10 percent to about 485 million pounds. The United States surpassed Hungary as the major supplier this year.

#### ***EEP Sales Turn Up***

While 1990 Export sales under the EEP rose about 40 percent through October 31 to some 25 million pounds, they remain low relative to the high of 208 million pounds during 1987. A recent sale of 13.2 million pounds of whole broilers to Jordan accounts for about one-half of current-year sales. New invitations for offers from U.S. exporters to sell whole broilers totalled 22.2 million pounds through October and included Jordan and Singapore. The average export bonus this year through October was \$600 per metric ton or about 27 cents per pound. The average bonus since the beginning of the poultry EEP in 1986 is 29.3 cents.

#### ***Export Outlook for 1991 Is Promising***

Broiler exports for 1991 are expected to be about the same as 1990, around 1 billion pounds. This forecast assumes continued large purchases by the USSR, just as in 1990. The USSR's continued need for large chicken meat imports is certain despite plans to increase domestic production. But imports could nevertheless drop in 1991, particularly, if payment problems arise. The very limited hard currency reserves have to be allocated among many pressing needs and poultry might not always get a share.

Exports to Japan could increase in 1991 as a lower dollar relative to the yen and continued competitive U.S. prices will move U.S. exports in this highly contested market. The

Hong Kong market is expected to hold steady. Exports to Mexico are highly dependent on ever-changing trade policies of the Mexican Government, although it is more committed to freer imports. U.S. parts exports are competitive but the Mexican industry is asking its Government to extend the import permit requirements until October 1991.

Exports to Canada are expected to continue growing. The bilateral trade agreement calls for an increase in the global import quota, based on Canada's domestic production. The agreed upon gradual reduction in tariffs also tends to increase trade. Singapore is likely to continue as a very stable market. Potential exists for increases to the Middle East, depending in part on the EEP but also on other suppliers' actions. Brazil, for example is expected to reduce poultry exports in 1991 apparently to supply increasing domestic demands for meat at reasonable prices.

#### ***Turkey Exports Rise in 1990***

Exports in 1990 are expected to increase 10-12 percent to about 45 million pounds and value will be 15 percent higher, at about \$28 million. Ample supplies at generally moderate prices have encouraged exports. Turkey parts make up about 80 percent of the exports, slightly less than a year ago. Parts are lower priced, averaging 56 cents per pound through August, compared with whole birds at 71 cents. Mexico continues as the leading buyer, taking about 25 percent of both total and whole bird exports. Parts, however, make up 80 percent of the exports to Mexico and average about 50 cents per pound. Production of turkey dropped in Mexico due to poor returns.

#### ***Growth in the Pacific Market***

The sharpest export growth was in the Pacific area, which increased 50 percent. This area, led by Hong Kong and South Korea, is taking nearly 40 percent of the total. Turkey consumption is very small in these countries and just beginning to increase, while production remains negligible. Strong economic growth in most Pacific rim countries makes them attractive markets with high potential. The large restaurant sector in Hong Kong is usually the front runner in the adoption of new foreign foods. South Korea continues to ban most chicken imports, but turkey imports have been liberalized. Taiwan liberalized the imports of U.S. turkey parts in September, no longer requiring the Council of Agriculture's approval to import. However, import permits from the Board of Foreign Trade continue to be required. U.S. further processed turkey products are gaining in popularity in Taiwan.

Further processed turkey sales to Germany are also up sharply from last year's low level, but sales to Canada have dropped as domestic production increased about 7 percent in 1990 compared with a less than 1 percent gain in 1989.



Table 18--U.S. egg exports to major importers 1/

| Country or area | January - August |        |
|-----------------|------------------|--------|
|                 | 1989             | 1990   |
| Thousand dozen  |                  |        |
| Canada          | 9,878            | 15,651 |
| Japan           | 24,221           | 12,837 |
| Hong Kong       | 4,439            | 8,586  |
| Mexico          | 4,009            | 3,364  |
| Jamaica         | 2,730            | 2,585  |
| Iraq            | 2,508            | 1,354  |
| Brazil          | 590              | 1,191  |
| United Kingdom  | 794              | 763    |
| Haiti           | 1,162            | 673    |
| Surinam         | 523              | 585    |
| Other           | 7,484            | 5,949  |
| Grand Total     | 58,338           | 53,538 |

1/ Shell, and shell equivalent of egg products.

Table 19--U.S. turkey exports to major importers

| Country or area  | January - August |        |
|------------------|------------------|--------|
|                  | 1989             | 1990   |
| 1000 lb.         |                  |        |
| Mexico           | 6,980            | 7,100  |
| Hong Kong        | 2,012            | 3,571  |
| Germany          | 296              | 2,255  |
| South Korea      | 211              | 2,218  |
| USSR             | 0                | 1,567  |
| Japan            | 889              | 1,531  |
| Western Samoa    | 1,898            | 1,416  |
| Canada           | 4,012            | 1,380  |
| South Africa     | 651              | 857    |
| Marshall Islands | 583              | 836    |
| Micronesia       | 966              | 511    |
| Other            | 8,264            | 5,911  |
| Grand Total      | 26,762           | 29,153 |

Nearly all exports to Canada are high-valued parts which have risen to over \$1.50 a pound.

In 1991, U.S. exports are projected to continue steady at 45-50 million pounds. Gains are possible as U.S. prices are expected to remain about the same. The Pacific rim markets will likely continue to have the best potential for increased U.S. turkey sales.

#### **Egg Exports Down but Value Up**

Egg exports will be down 5 percent to about 87 million dozen in 1990, primarily because of reduced egg product exports to Japan, the major market. Egg products will account for 40 percent of total exports on a shell equivalent basis. Shell egg exports (53 percent hatching, 47 percent other), making up 60 percent of the total, are running 25 percent ahead of last year. This, together with the higher average export value of egg products, will raise the total value of U.S. egg exports to about \$95 million, about 10 percent above last year.

The EC replaced the United States as the leading supplier to Japan because of relatively high U.S. egg prices combined with EC subsidies on egg product exports. Total egg product

imports by Japan have continued to increase slowly since 1989. U.S. egg product exports to Canada and Mexico are above last year but remain small.

#### **Canadian and Hong Kong Exports Strong**

Total egg exports are up sharply to Canada, which may replace Japan as the largest market in 1990. Slightly over one-half of the eggs to Canada are for hatching. Canadian total egg production is down for 2 consecutive years and eggs are generally higher-priced than in the U.S. Exports are also higher to Hong Kong, assisted by the EEP for table eggs. Production is very low and imports are large in Hong Kong. Exports to Mexico are expected to be about the same as last year and may be exceeded by Hong Kong. Exports to Iraq will be lower this year and have been banned since the August invasion of Kuwait.

#### **EEP Sales Increase in 1990**

Sales of table eggs under EEP through the third quarter of this year totaled 6.7 million dozen compared with 2.9 million for all of 1989. All the 1990 sales were to Hong Kong except for 0.7 million dozen to the United Arab Emirates. New invitations for bids at 8 million dozen this year were all to Hong Kong and double those of last year. The average export bonus paid was about 28 cents a dozen compared to a 29-cent average from the beginning of the program in 1986 through this year.

#### **Egg Exports To Increase in 1991**

U.S. egg exports are expected to be more competitive in 1991 as production increases and domestic prices ease from the relatively high levels of the past two years. Exports have already turned up in recent months, including egg products to Japan. The lower dollar relative to the yen and some other currencies will be a factor. Sales to Canada will continue strong, and EEP sales will again be a factor in the level of egg exports. Imports by Hong Kong are expected to continue increasing in 1991, as its consumption rises.

#### **Egg Imports Declined in 1990**

Imports fell in 1990 to about 12 million dozen equivalent, compared with the unusually high 25 million dozen last year. Most eggs imported are shell eggs other than for hatching. The largest suppliers of shell egg this year are Germany and Finland, while Canada supplies 80 percent of the imported hatching eggs. Important reasons for the decline in imports are the sharp increase in prices of eggs from Finland and Germany and lower U.S. prices in the second half. Imports are expected to decline again in 1991 as U.S. prices ease.



## Livestock and Red Meats

### Hogs

Hog producers are cautiously planning to expand production, despite about a year of favorable returns. Earlier this year, producers were concerned about dry weather and then a late corn crop, both of which resulted in higher feed costs. The sharp drop in hog prices in late summer further clouded the long-term profit picture. Producers during June-August had 3 percent fewer sows farrow than a year ago, although as of June 1, producers indicated intent to have nearly the same number of sows farrow as a year ago. Hog prices dropped

Table 20--Hogs on farms, farrowings, and pig crops, United States

| Inventory         | 1988   | 1989       | 1990     | 1989<br>-----<br>1988 | 1990<br>-----<br>1989 |
|-------------------|--------|------------|----------|-----------------------|-----------------------|
|                   |        | 1,000 head |          |                       | Percent<br>change     |
| March 1 inventory | 52,560 | 52,965     | 51,180   | 1                     | -3                    |
| Breeding          | 7,155  | 7,076      | 6,816    | -1                    | -4                    |
| Market            | 45,405 | 45,889     | 44,364   | 1                     | -3                    |
| Under 60 lb       | 17,749 | 17,624     | 16,902   | -1                    | -4                    |
| 60-119 lb         | 10,822 | 10,995     | 10,610   | 2                     | -4                    |
| 120-179 lb        | 9,143  | 9,498      | 9,214    | 4                     | -3                    |
| 180 + lb          | 7,691  | 7,772      | 7,638    | 1                     | -2                    |
| June 1 inventory  | 56,185 | 55,880     | 54,120   | -1                    | -3                    |
| Breeding          | 7,530  | 7,330      | 7,140    | -3                    | -3                    |
| Market            | 48,655 | 48,550     | 46,980   | 0                     | -3                    |
| Under 60 lb       | 20,888 | 20,682     | 19,916   | -1                    | -4                    |
| 60-119 lb         | 11,985 | 12,085     | 11,763   | 1                     | -3                    |
| 120-179 lb        | 8,780  | 8,780      | 8,535    | 0                     | -3                    |
| 180 + lb          | 7,002  | 7,003      | 6,766    | 0                     | -3                    |
| Sept. 1 inventory | 58,060 | 57,595     | 56,300   | -1                    | -2                    |
| Breeding          | 7,189  | 6,867      | 6,857    | -4                    | 0                     |
| Market            | 50,871 | 50,728     | 49,443   | 0                     | -3                    |
| Under 60 lb       | 19,560 | 19,233     | 19,048   | -2                    | -1                    |
| 60-119 lb         | 12,620 | 12,570     | 12,316   | 0                     | -2                    |
| 120-179 lb        | 10,525 | 10,615     | 10,207   | 1                     | -4                    |
| 180 + lb          | 8,166  | 8,310      | 7,872    | 2                     | -5                    |
| Dec. 1 inventory  | 55,469 | 53,852     |          | -3                    |                       |
| Breeding          | 7,054  | 6,868      |          | -3                    |                       |
| Market            | 48,415 | 46,983     |          | -3                    |                       |
| under 60 lb       | 18,011 | 17,195     |          | -5                    |                       |
| 60-119 lb         | 12,394 | 12,185     |          | -2                    |                       |
| 120-179 lb        | 10,025 | 9,680      |          | -3                    |                       |
| 180 + lb          | 7,984  | 7,923      |          | -1                    |                       |
| Sows farrowing    |        |            |          |                       |                       |
| Dec. 1/-Feb.      | 2,723  | 2,710      | 2,571    | 0                     | -5                    |
| March-May         | 3,307  | 3,304      | 3,137    | 0                     | -5                    |
| Dec. 1/-May       | 6,030  | 6,014      | 5,708    | 0                     | -5                    |
| June-August       | 3,072  | 2,991      | 2,910    | -3                    | -3                    |
| Sept.-Nov.        | 2,964  | 2,786      | 2,854 2/ | -6                    | 2                     |
| June-Nov.         | 6,036  | 5,777      | 5,764 2/ | -4                    | 0                     |
| Pig crop          |        |            |          |                       |                       |
| Dec. 1/-Feb.      | 21,061 | 21,068     | 20,129   | 0                     | -4                    |
| March-May         | 25,822 | 25,964     | 24,936   | 1                     | -4                    |
| Dec. 1/-May       | 46,883 | 47,032     | 45,065   | 0                     | -4                    |
| June-August       | 23,414 | 23,303     | 22,939   | 0                     | -2                    |
| Sept.-Nov.        | 22,586 | 21,549     |          | -5                    |                       |
| June-Nov.         | 46,000 | 44,852     |          | -2                    |                       |
|                   |        | Number     |          |                       |                       |
| Pigs per litter   |        |            |          |                       |                       |
| Dec. 1/-Feb.      | 7.73   | 7.77       | 7.83     | 1                     | 1                     |
| March-May         | 7.81   | 7.86       | 7.95     | 1                     | 1                     |
| Dec. 1/-May       | 7.77   | 7.82       | 7.90     | 1                     | 1                     |
| June-Aug.         | 7.62   | 7.79       | 7.88     | 2                     | 1                     |
| Sept.-Nov.        | 7.62   | 7.73       |          | 2                     |                       |
| June-Nov.         | 7.62   | 7.76       |          | 2                     |                       |

1/ December preceding year. 2/ Intentions

nearly \$10 per cwt in August but rebounded counterseasonally in late September. Prices remained relatively high in October before dropping again late in the month. Corn prices declined as concern about the late corn crop lessened, and higher hog prices in September-October improved prospects for future hog production.

Favorable producer returns are expected through most of 1991. The breeding herd and farrowing sows are expected to show year-over-year increases through most of 1991. However, if drought concerns raise the possibility of reduced corn production in 1991, given the relatively small carryout, the likely higher corn prices would curtail expansion plans.

Table 21--Hogs on farms, farrowings, and pig crops, 10 States

| Inventory         | 1988   | 1989   | 1990   | 1989<br>-----<br>1988 | 1990<br>-----<br>1989 |
|-------------------|--------|--------|--------|-----------------------|-----------------------|
| 1,000 head        |        |        |        | Percent<br>change     |                       |
| March 1 inventory | 41,470 | 41,655 | 40,190 | 0                     | -4                    |
| Breeding          | 5,555  | 5,440  | 5,250  | -2                    | -3                    |
| Market            | 35,915 | 36,215 | 34,940 | 1                     | -4                    |
| Under 60 lb       | 13,930 | 13,865 | 13,284 | 0                     | -4                    |
| 60-119 lb         | 8,580  | 8,678  | 8,335  | 1                     | -4                    |
| 120-179 lb        | 7,420  | 7,550  | 7,338  | 2                     | -3                    |
| 180 + lb          | 5,985  | 6,122  | 5,983  | 2                     | -2                    |
| June 1 inventory  | 44,065 | 44,020 | 42,800 | 0                     | -3                    |
| Breeding          | 5,630  | 5,565  | 5,440  | -1                    | -2                    |
| Market            | 38,435 | 38,455 | 37,360 | 0                     | -3                    |
| Under 60 lb       | 16,428 | 16,310 | 15,755 | -1                    | -3                    |
| 60-119 lb         | 9,510  | 9,595  | 9,345  | 1                     | -3                    |
| 120-179 lb        | 6,995  | 6,990  | 6,835  | 0                     | -2                    |
| 180 + lb          | 5,502  | 5,560  | 5,425  | 1                     | -2                    |
| Sept. 1 inventory | 45,000 | 45,200 | 44,410 | 0                     | -2                    |
| Breeding          | 5,460  | 5,335  | 5,340  | -2                    | 0                     |
| Market            | 39,540 | 39,865 | 39,070 | 1                     | -2                    |
| Under 60 lb       | 15,095 | 15,085 | 14,975 | 0                     | -1                    |
| 60-119 lb         | 9,885  | 9,885  | 9,660  | 0                     | -2                    |
| 120-179 lb        | 8,270  | 8,465  | 8,260  | 2                     | -2                    |
| 180 + lb          | 6,290  | 6,430  | 6,175  | 2                     | -4                    |
| Dec. 1 inventory  | 43,210 | 42,200 |        | -2                    |                       |
| Breeding          | 5,335  | 5,280  |        | -1                    |                       |
| Market            | 37,875 | 36,920 |        | -3                    |                       |
| under 60 lb       | 13,955 | 13,445 |        | -4                    |                       |
| 60-119 lb         | 9,747  | 9,602  |        | -1                    |                       |
| 120-179 lb        | 7,898  | 7,609  |        | -4                    |                       |
| 180 + lb          | 6,275  | 6,264  |        | 0                     |                       |
| Sows farrowing    |        |        |        |                       |                       |
| Dec. 1/-Feb.      | 2,123  | 2,109  | 2,013  | -1                    | -5                    |
| March-May         | 2,588  | 2,580  | 2,458  | 0                     | -5                    |
| Dec. 1/-May       | 4,711  | 4,689  | 4,471  | 0                     | -5                    |
| June-August       | 2,358  | 2,324  | 2,266  | -1                    | -2                    |
| Sept.-Nov.        | 2,301  | 2,190  | 2,252  | 2/-                   | 3                     |
| June-Nov.         | 4,659  | 4,514  | 4,518  | 2/-                   | 0                     |
| Pig crop          |        |        |        |                       |                       |
| Dec. 1/-Feb.      | 16,496 | 16,441 | 15,748 | 0                     | -4                    |
| March-May         | 20,252 | 20,309 | 19,576 | 0                     | -4                    |
| Dec. 1/-May       | 36,748 | 36,750 | 35,324 | 0                     | -4                    |
| June-August       | 18,000 | 18,167 | 17,922 | 1                     | -1                    |
| Sept.-Nov.        | 17,520 | 16,890 |        | -4                    |                       |
| June-Nov.         | 35,520 | 35,057 |        | -1                    |                       |
| Number            |        |        |        |                       |                       |
| Pigs per litter   |        |        |        |                       |                       |
| Dec. 1/-Feb.      | 7.77   | 7.80   | 7.82   | 0                     | 0                     |
| March-May         | 7.83   | 7.87   | 7.96   | 1                     | 1                     |
| Dec. 1/-May       | 7.80   | 7.84   | 7.90   | 0                     | 1                     |
| June-Aug.         | 7.63   | 7.82   | 7.91   | 2                     | 1                     |
| Sept.-Nov.        | 7.61   | 7.71   |        | 1                     |                       |
| June-Nov.         | 7.62   | 7.77   |        | 2                     |                       |

1/ December preceding year. 2/ Intentions



Table 22--Sow slaughter balance sheet, United States

| Item  | 1988       | 1989  | 1990  |
|---|------------|-------|-------|
|   | 1,000 head |       |       |
| December 1 breeding 1/<br>December-February | 7,080      | 7,054 | 6,868 |
| Comm. sow slaughter                         | 884        | 957   | 933   |
| Gilts added                                 | 959        | 979   | 881   |
| March 1 breeding<br>March-May               | 7,155      | 7,076 | 6,816 |
| Comm. sow slaughter                         | 868        | 975   | 893   |
| Gilts added                                 | 1,243      | 1,229 | 1,217 |
| June 1 breeding<br>June-August              | 7,530      | 7,330 | 7,140 |
| Comm. sow slaughter                         | 1,173      | 1,193 | 1,053 |
| Gilts added                                 | 832        | 730   | 770   |
| September 1 breeding<br>September-November  | 7,189      | 6,867 | 6,857 |
| Comm. sow slaughter                         | 1,104      | 1,105 |       |
| Gilts added                                 | 969        | 1,106 |       |

1/ December previous year.

### Uncertainty Brings Cautious Response

Reflecting producers' caution, the number of hogs kept for breeding totaled 6.9 million on September 1, about the same as a year ago. However, signs of expansion are present. As of September 1, producers planned to have 2 percent more sows farrow during September-February than a year earlier. However, the pig crop is expected to be up 3 percent due to an increase in pigs per litter. The litter size continued to increase, and the June-August number reached a record high. The number of pigs per litter is expected to continue to increase as producers adopt better management practices to increase productivity and lower costs.

The potential for further litter size increases exists. For example, during 1986-88, pigs per litter averaged 7.73 in the United States, and 8.56 in Denmark.

The cautious approach to expanding production is influenced by several factors. As mentioned previously, during the spring and early summer, uncertainty existed about the condition of the 1990 corn crop. The historically small carryover, combined with a possible reduced corn crop, created the potential for sharply higher corn prices. Another contributing factor is probably the unwillingness of producers to make substantial capital outlays now as they did in the late 1970's and early 1980's. Despite the favorable returns, producers are taking a conservative approach to expansion in order to remain financially stable. This suggests that producers' response to changes in returns will be less pronounced in the future.

### Pork Production To Rise in 1991

September 1, 1990, market hog inventories were down 3 percent from a year ago. Most of these hogs were from the March-May and June-August pig crops, which were down 4 and 3 percent, respectively. Combining hogs kept for breeding and market, the inventory of all hogs and pigs was down 2 percent from a year earlier.

Table 23--Summer pig crop and hog slaughter

| Year | Pig crop<br>June-Aug.  | Commercial<br>slaughter,<br>Jan-Mar. 1/ | Slaughter as<br>percentage of<br>pig crop |
|------|------------------------|---|---|
|      | - - - 1,000 head - - - |   | Percent                                   |
| 1970 | 25,142                 | 24,256                                  | 96.5                                      |
| 1971 | 23,260                 | 22,261                                  | 95.7                                      |
| 1972 | 21,838                 | 20,225                                  | 92.6                                      |
| 1973 | 21,209                 | 20,150                                  | 95.0                                      |
| 1974 | 20,273                 | 18,760                                  | 92.5                                      |
| 1975 | 18,022                 | 17,432                                  | 96.7                                      |
| 1976 | 21,656                 | 19,770                                  | 91.3                                      |
| 1977 | 22,239                 | 19,404                                  | 87.3                                      |
| 1978 | 22,937                 | 20,040                                  | 87.4                                      |
| 1979 | 26,915                 | 24,236                                  | 90.0                                      |
| 1980 | 24,417                 | 23,678                                  | 97.0                                      |
| 1981 | 23,548                 | 21,714                                  | 92.2                                      |
| 1982 | 21,383                 | 20,212                                  | 94.5                                      |
| 1983 | 23,361                 | 21,807                                  | 93.3                                      |
| 1984 | 22,346                 | 20,871                                  | 93.4                                      |
| 1985 | 22,010                 | 20,379                                  | 92.6                                      |
| 1986 | 21,280                 | 19,940                                  | 93.7                                      |
| 1987 | 22,904                 | 21,360                                  | 93.3                                      |
| 1988 | 23,414                 | 21,876                                  | 93.4                                      |
| 1989 | 23,303                 | 21,879                                  | 93.9                                      |
| 1990 | 22,939                 |   |   |

1/ January-March of the following year.

Source: Economic Research Service.

Table 24--Fall pig crop and hog slaughter

| Year | Pig crop<br>Sept.-Nov. | Commercial<br>slaughter,<br>Apr.-June 1/ | Slaughter as<br>percentage of<br>pig crop |
|------|------------------------|--|---|
|      | - - - 1,000 head - - - |  | Percent                                   |
| 1970 | 24,446                 | 23,609                                   | 96.6                                      |
| 1971 | 22,746                 | 21,389                                   | 94.0                                      |
| 1972 | 21,213                 | 19,478                                   | 91.8                                      |
| 1973 | 20,789                 | 21,014                                   | 101.1                                     |
| 1974 | 18,679                 | 17,808                                   | 95.3                                      |
| 1975 | 17,634                 | 16,821                                   | 95.4                                      |
| 1976 | 20,562                 | 18,743                                   | 91.2                                      |
| 1977 | 20,963                 | 19,042                                   | 90.8                                      |
| 1978 | 23,094                 | 21,740                                   | 94.1                                      |
| 1979 | 25,326                 | 25,039                                   | 98.9                                      |
| 1980 | 25,015                 | 22,594                                   | 90.3                                      |
| 1981 | 22,700                 | 20,712                                   | 91.2                                      |
| 1982 | 22,231                 | 21,666                                   | 97.5                                      |
| 1983 | 22,424                 | 21,124                                   | 94.2                                      |
| 1984 | 21,837                 | 21,343                                   | 97.7                                      |
| 1985 | 21,480                 | 20,316                                   | 94.6                                      |
| 1986 | 20,846                 | 18,911                                   | 90.7                                      |
| 1987 | 22,023                 | 20,877                                   | 94.8                                      |
| 1988 | 22,586                 | 21,944                                   | 97.2                                      |
| 1989 | 21,549                 | 20,257                                   | 94.0                                      |

1/ April-June of the following year.

Source: Economic Research Service.

If producers carry out their farrowing intentions, commercial pork production in 1991 is projected to rise about 3 percent above 1990. Production at 15.75 billion pounds would be about the same as in 1989. Production in 1990 is projected at 15.2 billion pounds, down 3 percent from 1989.

The June-August pig crop and farrowing intentions indicate that first-quarter- 1990 commercial slaughter will be down from a year ago, while the remaining quarters are projected to show year-over-year increases. The June-August 1990 pig crop was 2 percent lower than a year earlier and will sup-



Table 25--Winter pig crop and hog slaughter

| Year | Pig crop<br>Dec.-Feb.  | Commercial<br>slaughter,<br>July-Sept. | Slaughter as<br>percentage of<br>pig crop |
|------|------------------------|--|---|
|      | - - - 1,000 head - - - |  | Percent                                   |
| 1970 | 19,771                 | 20,619                                 | 104.3                                     |
| 1971 | 20,959                 | 22,308                                 | 106.4                                     |
| 1972 | 19,252                 | 19,441                                 | 101.0                                     |
| 1973 | 19,050                 | 16,875                                 | 88.6                                      |
| 1974 | 18,509                 | 19,705                                 | 106.5                                     |
| 1975 | 15,287                 | 15,307                                 | 100.1                                     |
| 1976 | 17,572                 | 17,982                                 | 102.3                                     |
| 1977 | 18,532                 | 18,293                                 | 98.7                                      |
| 1978 | 18,807                 | 18,554                                 | 98.7                                      |
| 1979 | 21,887                 | 22,083                                 | 100.9                                     |
| 1980 | 23,685                 | 22,158                                 | 93.6                                      |
| 1981 | 21,045                 | 21,277                                 | 101.1                                     |
| 1982 | 18,759                 | 18,940                                 | 101.0                                     |
| 1983 | 20,877                 | 21,374                                 | 102.4                                     |
| 1984 | 18,757                 | 19,495                                 | 103.9                                     |
| 1985 | 19,101                 | 20,556                                 | 107.6                                     |
| 1986 | 18,567                 | 18,573                                 | 100.0                                     |
| 1987 | 19,484                 | 19,396                                 | 99.5                                      |
| 1988 | 21,061                 | 21,378                                 | 101.5                                     |
| 1989 | 21,068                 | 21,567                                 | 102.4                                     |
| 1990 | 20,129                 | 20,350                                 | 101.1                                     |

Source: Economic Research Service.

Table 26--Spring pig crop and hog slaughter

| Year | Pig crop<br>Mar.-May   | Commercial<br>slaughter,<br>Oct.-Dec. | Slaughter as<br>percentage of<br>pig crop |
|------|------------------------|---------------------------------------|---|
|      | - - - 1,000 head - - - |                                       | Percent                                   |
| 1970 | 32,355                 | 25,271                                | 78.1                                      |
| 1971 | 30,959                 | 24,264                                | 78.4                                      |
| 1972 | 28,271                 | 21,617                                | 76.5                                      |
| 1973 | 27,075                 | 20,217                                | 74.7                                      |
| 1974 | 26,283                 | 20,893                                | 79.5                                      |
| 1975 | 20,243                 | 16,813                                | 83.1                                      |
| 1976 | 24,605                 | 21,549                                | 87.6                                      |
| 1977 | 24,428                 | 20,497                                | 83.9                                      |
| 1978 | 23,674                 | 20,316                                | 85.8                                      |
| 1979 | 28,664                 | 25,237                                | 88.0                                      |
| 1980 | 28,603                 | 24,641                                | 86.1                                      |
| 1981 | 26,560                 | 24,026                                | 90.5                                      |
| 1982 | 22,816                 | 20,825                                | 91.3                                      |
| 1983 | 26,532                 | 24,334                                | 91.7                                      |
| 1984 | 23,646                 | 22,742                                | 96.2                                      |
| 1985 | 23,445                 | 21,721                                | 92.6                                      |
| 1986 | 21,878                 | 20,330                                | 92.9                                      |
| 1987 | 24,012                 | 22,834                                | 95.1                                      |
| 1988 | 25,822                 | 24,180                                | 93.6                                      |
| 1989 | 25,964                 | 23,307                                | 89.8                                      |
| 1990 | 24,936                 |                                       |   |

Source: Economic Research Service.

ply most of the first-quarter 1991 slaughter. Thus, commercial slaughter in the first quarter is projected to be 2 percent below 1990 also.

Second-quarter 1991 slaughter will largely be drawn from the September-November pig crop. The crop is expected to be up 3 percent based on September 1 farrowing intentions and an increase in pigs per litter. However, commercial slaughter in the second quarter is projected to rise 5 percent above a year ago. This is because the percentage of the September-November pig crop slaughtered is expected to be higher in 1991 than 1990, based on previous-years percentages. Third-quarter 1991 slaughter, drawn from the December-February pig crop, is projected to be up nearly 4 percent

Table 27--Federally inspected hog slaughter

| Week ended 1/ | 1987      | 1988  | 1989  | 1990  |
|---------------|-----------|-------|-------|-------|
|               | Thousands |       |       |       |
| Jan.          |           |       |       |       |
| 6             | 1,683     | 1,726 | 1,419 | 1,337 |
| 13            | 1,659     | 1,766 | 1,719 | 1,763 |
| 20            | 1,527     | 1,605 | 1,679 | 1,674 |
| 27            | 1,500     | 1,543 | 1,647 | 1,684 |
| Feb.          |           |       |       |       |
| 3             | 1,455     | 1,535 | 1,631 | 1,647 |
| 10            | 1,502     | 1,545 | 1,656 | 1,656 |
| 17            | 1,395     | 1,542 | 1,678 | 1,677 |
| 24            | 1,533     | 1,595 | 1,665 | 1,624 |
| Mar.          |           |       |       |       |
| 3             | 1,556     | 1,610 | 1,621 | 1,713 |
| 10            | 1,578     | 1,674 | 1,716 | 1,605 |
| 17            | 1,574     | 1,639 | 1,703 | 1,707 |
| 24            | 1,504     | 1,631 | 1,601 | 1,631 |
| 31            | 1,529     | 1,599 | 1,648 | 1,591 |
| Apr.          |           |       |       |       |
| 7             | 1,553     | 1,573 | 1,761 | 1,661 |
| 14            | 1,468     | 1,655 | 1,780 | 1,642 |
| 21            | 1,393     | 1,660 | 1,813 | 1,594 |
| 28            | 1,453     | 1,695 | 1,764 | 1,594 |
| May           |           |       |       |       |
| 5             | 1,475     | 1,654 | 1,732 | 1,579 |
| 12            | 1,440     | 1,634 | 1,654 | 1,586 |
| 19            | 1,448     | 1,577 | 1,632 | 1,528 |
| 26            | 1,232     | 1,533 | 1,618 | 1,523 |
| June          |           |       |       |       |
| 2             | 1,385     | 1,323 | 1,343 | 1,236 |
| 9             | 1,372     | 1,489 | 1,589 | 1,460 |
| 16            | 1,341     | 1,513 | 1,589 | 1,452 |
| 23            | 1,356     | 1,503 | 1,533 | 1,472 |
| 30            | 1,193     | 1,537 | 1,500 | 1,402 |
| July          |           |       |       |       |
| 7             | 1,360     | 1,330 | 1,244 | 1,191 |
| 14            | 1,345     | 1,537 | 1,557 | 1,461 |
| 21            | 1,354     | 1,542 | 1,518 | 1,430 |
| 28            | 1,334     | 1,456 | 1,501 | 1,361 |
| Aug.          |           |       |       |       |
| 4             | 1,372     | 1,528 | 1,543 | 1,463 |
| 11            | 1,445     | 1,571 | 1,612 | 1,471 |
| 18            | 1,404     | 1,513 | 1,615 | 1,607 |
| 25            | 1,475     | 1,563 | 1,610 | 1,607 |
| Sept.         |           |       |       |       |
| 1             | 1,548     | 1,607 | 1,713 | 1,641 |
| 8             | 1,363     | 1,517 | 1,545 | 1,641 |
| 15            | 1,671     | 1,807 | 1,888 | 1,747 |
| 22            | 1,621     | 1,868 | 1,853 | 1,722 |
| 29            | 1,658     | 1,803 | 1,785 | 1,676 |
| Oct.          |           |       |       |       |
| 6             | 1,640     | 1,830 | 1,810 | 1,695 |
| 13            | 1,720     | 1,838 | 1,810 | 1,628 |
| 20            | 1,664     | 1,845 | 1,797 | 1,665 |
| 27            | 1,763     | 1,895 | 1,739 | 1,624 |
| Nov.          |           |       |       |       |
| 3             | 1,792     | 1,908 | 1,812 |       |
| 10            | 1,778     | 1,827 | 1,791 |       |
| 17            | 1,772     | 1,920 | 1,901 |       |
| 24            | 1,463     | 1,562 | 1,564 |       |
| Dec.          |           |       |       |       |
| 1             | 1,845     | 1,956 | 1,908 |       |
| 8             | 1,879     | 1,887 | 1,832 |       |
| 15            | 1,729     | 1,800 | 1,716 |       |
| 22            | 1,150     | 1,668 | 1,521 |       |
| 29            | 1,458     | 1,420 | 1,443 |       |

1/ Corresponding dates to 1990: 1987, Jan. 10; 1988, Jan. 9; 1989, Jan. 7.

over 1990. The December-February pig crop is expected to be up about 3 percent, based on farrowing intentions and increased litter size.

The continued favorable returns are expected to encourage producers to have more gilts bred in the fall and winter. Thus, the March-May 1991 pig crop is expected to be 5 percent above 1990. If so, then the spring pig crop would support a fourth-quarter 1991 commercial slaughter increase of 7 percent from this year's relatively low level. Fourth-quarter-1990 commercial slaughter, as a percentage of the spring pig crop, is projected to be historically low.



Table 28--Commercial hog slaughter 1/ and production

| Year | Barrows<br>& gilts   | Sows  | Boars | Total  | Dress-<br>ed wt. | Comm'l-<br>prod. |
|------|----------------------|-------|-------|--------|------------------|------------------|
|      | ----- 1,000 hd.----- |       |       |        | lb.              | Mil lb.          |
| 1986 |                      |       |       |        |                  |                  |
| I    | 19,272               | 920   | 187   | 20,379 | 175              | 3,570            |
| II   | 19,224               | 896   | 196   | 20,316 | 176              | 3,568            |
| III  | 17,365               | 999   | 210   | 18,573 | 174              | 3,237            |
| IV   | 19,223               | 927   | 179   | 20,330 | 178              | 3,623            |
| Year | 75,084               | 3,742 | 772   | 79,598 | 176              | 13,998           |
| 1987 |                      |       |       |        |                  |                  |
| I    | 19,008               | 762   | 170   | 19,940 | 178              | 3,540            |
| II   | 17,877               | 846   | 188   | 18,911 | 176              | 3,327            |
| III  | 18,201               | 1,009 | 186   | 19,396 | 174              | 3,384            |
| IV   | 21,776               | 888   | 170   | 22,834 | 178              | 4,061            |
| Year | 76,862               | 3,505 | 714   | 81,081 | 177              | 14,312           |
| 1988 |                      |       |       |        |                  |                  |
| I    | 20,281               | 890   | 189   | 21,360 | 177              | 3,790            |
| II   | 19,736               | 941   | 200   | 20,877 | 179              | 3,727            |
| III  | 19,968               | 1,182 | 228   | 21,378 | 177              | 3,775            |
| IV   | 22,932               | 1,054 | 194   | 24,180 | 179              | 4,331            |
| Year | 82,916               | 4,068 | 811   | 87,795 | 178              | 15,623           |
| 1989 |                      |       |       |        |                  |                  |
| I    | 20,738               | 943   | 195   | 21,876 | 178              | 3,887            |
| II   | 20,687               | 1,038 | 219   | 21,944 | 179              | 3,928            |
| III  | 20,175               | 1,178 | 209   | 21,562 | 176              | 3,789            |
| IV   | 22,048               | 1,069 | 187   | 23,304 | 178              | 4,155            |
| Year | 83,648               | 4,228 | 810   | 88,686 | 178              | 15,759           |
| 1990 |                      |       |       |        |                  |                  |
| I    | 20,786               | 886   | 207   | 21,879 | 178              | 3,902            |
| II   | 19,096               | 940   | 221   | 20,257 | 180              | 3,645            |
| III  | 19,109               | 1,030 | 211   | 20,350 | 179              | 3,639            |

1/ Classes estimated.

**Hog Prices To Show Small Decline**

Barrows and gilts at the 7-markets are expected to average in the mid-\$50's per cwt in 1990, \$10-11 higher than the year-earlier level. Prices are expected to be less volatile in 1991 and average in the low- to mid-\$50's per cwt. Large sup-

plies of pork, competing meats, and the weak economy are expected to pressure market prices in 1991. Through the first three-quarters of the year, barrow and gilt prices are expected to average in the low- to mid-\$50's. In the fourth-quarter, prices in the high \$40's per cwt are possible, but are expected to average around \$50 per cwt.

For most of 1990, reduced supplies of pork have kept wholesale prices relatively high. The prices also were high relative to broilers. The reduced supplies and high prices discouraged retail pork features. As a result, retail pork prices reached record levels this summer. Then prices moderated, possibly reflecting some consumer resistance. This wholesale price moderation, especially for loins, is expected to encourage retailers to feature pork in late 1990 and early 1991. As a result, retail pork prices are retreating from the records reached, but are expected to average above 1990 in first-quarter 1991.

Consumers will find hams less plentiful this fall and can expect to pay higher prices. Frozen ham stocks on September 30, were 22 percent below a year ago. Fourth-quarter commercial pork production is expected to be down 3 percent from a year ago. Wholesale ham prices (17-20 lb.) rose to over \$1 per pound in late September but have not exhibited the typical strong seasonal upward pattern this fall. Last year, ham prices reached only \$1 per pound late in the holiday buying season.

Table 29--Pork: Retail, wholesale, and farm values, spreads, and farmers' share

| Year                      | Retail<br>price 1/ | Wholesale<br>value 2/ | Gross<br>farm<br>value 3/ | By-product<br>allowance 4/ | Net farm<br>value 5/ | Farm retail spread |                      |                    | Farmers'<br>share 6/ |         |
|---------------------------|--------------------|-----------------------|---------------------------|----------------------------|----------------------|--------------------|----------------------|--------------------|----------------------|---------|
|                           |                    |                       |                           |                            |                      | Total              | Wholesale-<br>retail | Farm-<br>wholesale |                      |         |
| -----Cents per pound----- |                    |                       |                           |                            |                      |                    |                      |                    |                      | Percent |
| 1985                      | 162.0              | 101.1                 | 76.2                      | 4.8                        | 71.4                 | 90.6               | 60.9                 | 29.7               | 44                   |         |
| 1986                      | 178.4              | 110.9                 | 87.3                      | 4.9                        | 82.4                 | 96.0               | 67.5                 | 28.5               | 46                   |         |
| 1987                      | 188.4              | 113.0                 | 87.9                      | 5.2                        | 82.7                 | 105.7              | 75.4                 | 30.3               | 44                   |         |
| 1988                      | 183.4              | 101.0                 | 73.8                      | 4.6                        | 69.4                 | 114.0              | 82.4                 | 31.6               | 38                   |         |
| I                         | 183.9              | 104.3                 | 76.4                      | 4.6                        | 71.8                 | 112.1              | 79.6                 | 32.5               | 39                   |         |
| II                        | 184.8              | 105.1                 | 78.0                      | 4.6                        | 73.4                 | 111.4              | 79.7                 | 31.7               | 40                   |         |
| III                       | 185.9              | 99.5                  | 75.0                      | 4.6                        | 70.4                 | 115.5              | 86.4                 | 29.1               | 38                   |         |
| IV                        | 179.0              | 95.3                  | 66.2                      | 4.0                        | 62.2                 | 116.8              | 83.7                 | 33.1               | 35                   |         |
| 1989                      | 182.9              | 99.2                  | 75.0                      | 4.6                        | 70.4                 | 112.5              | 83.7                 | 28.8               | 38                   |         |
| I                         | 180.0              | 92.9                  | 69.4                      | 4.3                        | 65.1                 | 114.9              | 87.1                 | 27.8               | 36                   |         |
| II                        | 178.6              | 94.6                  | 71.5                      | 4.4                        | 67.1                 | 111.5              | 84.0                 | 27.5               | 38                   |         |
| III                       | 183.9              | 100.8                 | 78.2                      | 4.8                        | 73.4                 | 110.5              | 83.1                 | 27.4               | 40                   |         |
| IV                        | 188.9              | 108.4                 | 80.8                      | 4.7                        | 76.1                 | 112.8              | 80.5                 | 32.3               | 40                   |         |
| 1990                      |                    |                       |                           |                            |                      |                    |                      |                    |                      |         |
| Jan.                      | 195.1              | 104.8                 | 81.5                      | 4.9                        | 76.6                 | 118.5              | 90.3                 | 28.2               | 39                   |         |
| Feb.                      | 196.5              | 105.6                 | 83.4                      | 5.0                        | 78.4                 | 118.1              | 90.9                 | 27.2               | 40                   |         |
| Mar.                      | 197.0              | 110.9                 | 88.5                      | 5.2                        | 83.3                 | 113.7              | 86.1                 | 27.6               | 42                   |         |
| I                         | 196.2              | 107.1                 | 84.5                      | 5.1                        | 79.4                 | 116.8              | 89.1                 | 27.7               | 40                   |         |
| Apr.                      | 200.9              | 114.8                 | 91.6                      | 5.5                        | 86.1                 | 114.8              | 86.1                 | 28.7               | 43                   |         |
| May                       | 206.2              | 127.2                 | 105.7                     | 6.2                        | 99.5                 | 106.7              | 79.0                 | 27.7               | 48                   |         |
| June                      | 218.1              | 125.6                 | 103.1                     | 6.2                        | 96.9                 | 121.2              | 92.5                 | 28.7               | 44                   |         |
| II                        | 208.4              | 122.5                 | 100.2                     | 6.0                        | 94.2                 | 114.2              | 85.9                 | 28.3               | 45                   |         |
| July                      | 222.2              | 127.3                 | 105.4                     | 6.2                        | 99.2                 | 123.0              | 94.9                 | 28.1               | 45                   |         |
| Aug.                      | 224.9              | 120.5                 | 96.2                      | 5.8                        | 90.4                 | 134.5              | 104.4                | 30.1               | 40                   |         |
| Sept.                     | 220.8              | 120.7                 | 93.4                      | 5.4                        | 88.0                 | 132.8              | 100.1                | 32.7               | 40                   |         |
| III                       | 222.6              | 122.8                 | 98.3                      | 5.8                        | 92.5                 | 130.1              | 99.8                 | 30.3               | 42                   |         |
| Oct.                      | 223.2              | 124.4                 | 96.7                      | 5.5                        | 91.2                 | 132.0              | 98.8                 | 33.2               | 41                   |         |

1/ Estimated weighted-average of BLS prices of retail cuts from pork carcass. 2/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used. 3/ Market values to producer for 1.7 lb of live animal, equivalent to 1 lb of retail cuts. 4/ Portion of gross farm value attributable to edible and inedible by-products. 5/ Gross farm value minus by-product allowance. 6/ Percent net farm value is of retail price.



Table 30--Farrow-to-finish hog production costs and returns, 1,600 head annual sales, North Central Region 1/

| Item  | 1989  |       |       |       |       | 1990  |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   |
| Dollars per cwt                             |       |       |       |       |       |       |       |       |       |       |
| Cash receipts: 2/                           |       |       |       |       |       |       |       |       |       |       |
| Market hogs (94.25 lb)                      | 46.41 | 45.28 | 46.00 | 48.81 | 51.19 | 58.61 | 58.03 | 58.76 | 53.50 | 50.77 |
| Cull sows (5.75 lb)                         | 2.22  | 2.39  | 2.41  | 2.63  | 2.81  | 3.05  | 2.93  | 2.73  | 2.76  | 2.55  |
| Total                                       | 48.63 | 47.67 | 48.41 | 51.44 | 54.00 | 61.66 | 60.96 | 61.49 | 56.26 | 53.32 |
| Cash expenses:                              |       |       |       |       |       |       |       |       |       |       |
| Feed--                                      |       |       |       |       |       |       |       |       |       |       |
| Corn (345.6 lb)                             | 14.49 | 14.40 | 14.02 | 14.27 | 14.29 | 14.18 | 13.89 | 14.20 | 14.78 | 15.36 |
| Soybean meal (70.6 lb)                      | 10.80 | 10.80 | 9.33  | 9.33  | 9.33  | 8.76  | 8.76  | 8.76  | 8.25  | 8.25  |
| Mixing concentrates (14.3 lb)               | 2.99  | 2.99  | 3.05  | 3.05  | 3.05  | 2.97  | 2.95  | 2.95  | 2.95  | 2.96  |
| Total feed                                  | 28.28 | 28.19 | 26.40 | 26.65 | 26.67 | 25.91 | 25.60 | 25.91 | 25.98 | 26.57 |
| Other--                                     |       |       |       |       |       |       |       |       |       |       |
| Veterinary and medicine 3/                  | 0.78  | 0.78  | 0.80  | 0.80  | 0.80  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  |
| Fuel, lube, and electricity                 | 1.54  | 1.54  | 1.58  | 1.58  | 1.58  | 1.59  | 1.48  | 1.47  | 1.46  | 1.50  |
| Machinery and building repairs              | 2.52  | 2.55  | 2.55  | 2.55  | 2.45  | 2.45  | 2.45  | 2.45  | 2.45  | 2.46  |
| Hired labor 4/                              | 1.48  | 1.53  | 1.53  | 1.53  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  | 1.40  |
| Miscellaneous                               | 0.69  | 0.69  | 0.70  | 0.70  | 0.70  | 0.65  | 0.65  | 0.64  | 0.64  | 0.65  |
| Total variable expenses                     | 35.29 | 35.28 | 33.56 | 33.81 | 33.56 | 32.73 | 32.31 | 32.60 | 32.66 | 33.35 |
| General farm overhead                       | 1.90  | 1.86  | 1.92  | 2.04  | 2.14  | 2.28  | 2.24  | 2.25  | 2.06  | 1.96  |
| Taxes and insurance                         | 0.70  | 0.70  | 0.72  | 0.72  | 0.72  | 0.69  | 0.68  | 0.68  | 0.65  | 0.68  |
| Interest                                    | 3.97  | 3.90  | 3.85  | 4.09  | 4.30  | 4.91  | 4.85  | 4.89  | 4.48  | 4.24  |
| Total fixed expenses                        | 6.57  | 6.46  | 6.49  | 6.85  | 7.16  | 7.88  | 7.77  | 7.82  | 7.19  | 6.88  |
| Total cash expenses 5/                      | 41.86 | 41.74 | 40.05 | 40.66 | 40.72 | 40.61 | 40.08 | 40.42 | 39.85 | 40.23 |
| Receipts less cash expenses                 | 6.77  | 5.93  | 8.36  | 10.78 | 13.28 | 21.05 | 20.88 | 21.07 | 16.41 | 13.09 |
| Capital replacement                         | 6.06  | 6.03  | 6.10  | 6.11  | 6.15  | 5.90  | 5.89  | 5.92  | 5.94  | 6.01  |
| Receipts less cash expenses and replacement | 0.71  | -0.10 | 2.26  | 4.67  | 7.13  | 15.15 | 14.99 | 15.15 | 10.47 | 7.08  |

1/The feed rations and expense items do not necessarily coincide with the experience of the individual hog operator and are an average of a group of operations. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Based on 94.25 lb of barrows and gilts liveweight and 5.75 lb of sows per cwt sold. 3/ Includes costs of feed medication, that is usually included as part of the feed cost. 4/ Based on .204 hours per cwt of liveweight hog marketed. 5/ Does not include a charge for family or operator labor (.732 hours)

Table 31--Corn Belt hog feeding: Selected costs at current rates 1/

| Purchased during 1989-90                      | Nov.   | Dec.   | Jan.   | Feb.   | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Marketed during 1989-90                       | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.   | Nov.   | Dec.   | Jan.   | Feb.   |
| Expenses: (\$/head)                           |        |        |        |        |        |        |        |        |        |        |        |        |
| 40-50 lb feeder pig                           | 38.33  | 36.21  | 44.58  | 54.41  | 63.19  | 64.97  | 56.80  | 47.32  | 46.35  | 45.85  | 45.91  | 52.33  |
| Corn (11 bu)                                  | 24.42  | 24.64  | 24.42  | 24.75  | 25.85  | 27.83  | 29.04  | 29.59  | 28.88  | 27.28  | 25.14  | 23.10  |
| Protein supplement (130 lb)                   | 20.93  | 20.93  | 19.83  | 19.83  | 19.83  | 18.98  | 18.98  | 18.98  | 19.50  | 19.50  | 19.50  | 19.50  |
| Total feed                                    | 45.35  | 45.57  | 44.25  | 44.58  | 45.68  | 46.81  | 48.02  | 48.57  | 48.38  | 46.78  | 44.64  | 42.60  |
| Labor & management (1.3 hr)                   | 12.74  | 12.74  | 13.48  | 13.48  | 13.48  | 12.74  | 12.74  | 12.74  | 12.61  | 12.61  | 12.61  | 12.61  |
| Vet medicine 2/                               | 2.90   | 2.90   | 2.95   | 2.95   | 2.95   | 2.98   | 2.98   | 2.98   | 2.99   | 3.05   | 3.05   | 3.05   |
| Interest on purchase (4 mo)                   | 1.55   | 1.47   | 1.79   | 2.18   | 2.53   | 2.57   | 2.25   | 1.87   | 1.84   | 1.82   | 1.82   | 2.07   |
| Power, equip, fuel, shelter deprec. 2/        | 7.05   | 7.05   | 7.18   | 7.18   | 7.18   | 7.26   | 7.26   | 7.26   | 7.29   | 7.44   | 7.44   | 7.44   |
| Death loss (4% of purchase)                   | 1.53   | 1.45   | 1.78   | 2.18   | 2.53   | 2.60   | 2.27   | 1.89   | 1.85   | 1.83   | 1.84   | 2.09   |
| Transportation (100 miles)                    | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   |
| Marketing expenses                            | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   |
| Misc. & indirect costs 2/                     | 0.72   | 0.72   | 0.74   | 0.74   | 0.74   | 0.74   | 0.74   | 0.74   | 0.75   | 0.76   | 0.76   | 0.76   |
| Total   | 111.79 | 109.73 | 118.37 | 129.32 | 139.90 | 142.29 | 134.68 | 124.99 | 123.68 | 121.76 | 119.69 | 124.57 |
| Selling price required to cover: (\$/cwt)     |        |        |        |        |        |        |        |        |        |        |        |        |
| Feed and feeder costs (220 lb)                | 38.04  | 37.17  | 40.38  | 45.00  | 49.49  | 50.81  | 47.65  | 43.59  | 43.06  | 42.10  | 41.16  | 43.15  |
| All costs (220 lb)                            | 50.81  | 49.88  | 53.80  | 58.78  | 63.59  | 64.68  | 61.22  | 56.81  | 56.22  | 55.35  | 54.40  | 56.62  |
| Feed cost per 100-lb gain (180 lb)            | 25.19  | 25.32  | 24.58  | 24.77  | 25.38  | 26.01  | 26.68  | 26.98  | 26.88  | 25.99  | 24.80  | 23.67  |
| Barrows and gilts, (7 mkts)                   | 51.91  | 54.11  | 62.18  | 60.75  | 61.87  | 56.05  | 55.10  | 57.15  |        |        |        |        |
| Net margin                                    | 1.10   | 4.23   | 8.38   | 1.97   | -1.72  | -8.63  | -6.12  | 0.34   |        |        |        |        |
| Prices:                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| 40-lb feeder pig (So. Missouri) \$/head       | 38.33  | 36.21  | 44.58  | 54.41  | 63.19  | 64.97  | 56.80  | 47.32  | 46.35  | 45.85  | 45.91  | 52.33  |
| Corn \$/bu 3/                                 | 2.22   | 2.24   | 2.22   | 2.25   | 2.35   | 2.53   | 2.64   | 2.69   | 2.63   | 2.48   | 2.29   | 2.10   |
| Protein supp. 38-42 % \$/cwt 4/               | 16.10  | 16.10  | 15.25  | 15.25  | 15.25  | 14.60  | 14.60  | 14.60  | 15.00  | 15.00  | 15.00  | 15.00  |
| Labor & management \$/hr 5/                   | 9.80   | 9.80   | 10.37  | 10.37  | 10.37  | 9.80   | 9.80   | 9.80   | 9.70   | 9.70   | 9.70   | 9.70   |
| Interest rate, annual                         | 12.15  | 12.15  | 12.02  | 12.02  | 12.02  | 11.88  | 11.88  | 11.88  | 11.88  | 11.88  | 11.88  | 11.87  |
| Transportation rate (\$/cwt 100 miles) 6/     | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   |
| Marketing Expenses (\$/cwt) 7/                | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   |
| Index of prices paid by farmers (1910-14=100) | 1224   | 1224   | 1246   | 1246   | 1246   | 1260   | 1260   | 1260   | 1265   | 1291   | 1291   | 1291   |

1/ Although a majority of operations in the Corn Belt are from farrow-to-finish, relative fattening expenses will be similar. Costs represent only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 3/ Average price received by farmers in Iowa and Illinois. 4/ Average prices paid by farmers in Iowa and Illinois. 5/ Assumes an owner-operator receiving twice the farm labor rate. 6/ Converted from cents/mile for a 44,000-pound haul. 7/ Yardage plus commission fees at a Midwest terminal market.



Lower wholesale prices and renewed retail interest in pork features is expected to lower retail prices in the second half of 1991. However, in first-half 1991, retail prices are expected to average above 1990. Retail pork prices rose rapidly in first-half 1990. Thus, annual average prices for 1990 and 1991 are projected to be about the same. In 1990, retail pork prices are expected to average around 15 percent over 1989's \$1.83 per pound. Farm-to-retail spreads are expected to widen in 1991, as farm prices moderate and inflationary pressures push up marketing costs.

## U.S. Pork Trade

### *U.S. Pork Imports Catching Up With Last Year*

U.S. pork imports for January-August equaled 611 million pounds, just under 4 percent below 1989. Imports from the EC are about 35 percent higher than for the first 8 months of 1989. Imports from Canada, while still 8 percent below last year, have increased from the low levels earlier this year. Imports from Eastern Europe were mixed, with imports for Hungary up 17 percent while those from Poland and Yugoslavia down 43 and 26 percent, respectively. If these trends continue, total pork imports for the year will be about 925 million pounds, 3 percent above last year.

U.S. imports have been limited by a number of factors. European producers have reacted cautiously to higher EC prices and are expanding production slowly. Although Danish producers have retained breeding animals, significantly larger pork supplies are not expected before the end of 1990 or early 1991. However, higher U.S. prices in the second and third quarters likely encouraged increased Danish shipments at the expense of the U.K. market. Imports of Danish pork in the first 8 months equaled 187 million pounds compared with 135 million pounds in 1989.

Pork imports from Canada totaled 294 million pounds in the first 8 months. High U.S. prices in the second and third quarters encouraged an increasing quantity of Canadian pork to cross the border. Although, Canadian slaughter was 5 percent lower through September, slaughter in Alberta was 21 percent higher.

Total pork imports for 1991 are expected to increase only 5 percent to about 965 million pounds. Imports from Denmark should recover to historic levels; most of the increase in imports will be in frozen product, since canned product imports have remained relatively stable. Canadian shipments are not expected to show dramatic growth as third quarter farrowing intentions would point to little change in production. Imports of pork from Eastern Europe will most likely remain low in 1991. However, reports of a good potato harvest in Poland bode well for increased pork production, since potatoes represent a major hog feed component in that country. This would increase available supplies for export to the United States.

Table 32--U.S. pork trade, carcass weight 1/

| Country<br>or area | Annual<br>1989 | January - August |       |                   |
|--------------------|----------------|------------------|-------|-------------------|
|                    |                | 1989             | 1990  | Percent<br>change |
| -----              |                |                  |       |                   |
|                    |                | Million pounds   |       | Percent           |
| Imports            |                |                  |       |                   |
| Canada             | 453.2          | 321.6            | 294.5 | -8.4              |
| Denmark            | 198.4          | 135.1            | 187.1 | 38.5              |
| Poland             | 112.8          | 86.3             | 49.2  | -42.9             |
| Hungary            | 26.2           | 18.9             | 22.1  | 17.1              |
| Other              | 105.1          | 73.0             | 58.0  | -20.6             |
| Total              | 895.7          | 634.8            | 610.9 | -3.8              |
| Exports            |                |                  |       |                   |
| Japan              | 147.8          | 88.6             | 86.0  | -2.9              |
| Canada             | 13.0           | 8.1              | 13.9  | 71.2              |
| Mexico             | 60.2           | 41.7             | 21.6  | -48.2             |
| Caribbean          | 15.0           | 8.5              | 8.8   | 3.3               |
| Other              | 26.5           | 14.6             | 27.8  | 90.5              |
| Total              | 262.4          | 161.5            | 158.1 | -2.1              |

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

### *Total Hog Imports Down but Feeder Pig Shipments Increase*

Live hog imports from Canada were about 633,000 head during January-August, 18 percent below 1989. All the decline was in imports of slaughter hogs, which were 26 percent below last year. The number of pigs weighing less than 110 pounds (50 kilograms) imported increased by almost 34 percent to 144,000 head. Approximately 23 percent of total hog imports through August 1990 are lighter-weight hogs, up from 14 percent for the same period in 1989.

Although the U.S. Commerce Department had proposed reducing the countervailing duty on live hogs to 7.1 Canadian cents per hundredweight in May, there has been no announcement of a final ruling. The duty of Can \$2.20 per hundredweight remains in effect.

### *Pork Exports Fall Below 1989*

U.S. pork exports to Japan fell below last year in the first 8 months of 1990 to 86 million pounds. Although the third quarter is traditionally a time of reducing buying, this low level of activity could stretch into the fourth quarter and result in lower exports for the entire year. Total exports for 1990 are expected to be less than 230 million pounds, about 13 percent below 1989.

Given the low level of U.S. exports in 1990 and improved prospects for Japanese imports in 1991, the outlook for U.S. exports is brighter in 1991. Exports could regain the 1989 level of 265 million pounds, but this will depend upon increased sales to Mexico as well as Japan. The potential for increased production in Denmark could pressure U.S. exports to Japan, but could be offset by declines in Taiwanese production and exports.



## Dispute Panel Rules on Canadian Pork Countervailing Duty

Following the imposition of a countervailing duty on imports of Canadian fresh, chilled, and frozen pork, Canada appealed both the U.S. International Trade Commission (USITC) ruling on injury and the U.S. Commerce Department's (USDOC) calculation of the duty deposit to the Binational Dispute Settlement Panel under the terms of the U.S. Canadian Free Trade Agreement. In September, the Panel remanded the case back down to the USITC for reconsideration on the grounds that the statistics and methods used to calculate Canadian production and trade shares were incorrect. A major factor in the decision was a perceived overstatement of Canadian production growth resulting from a change in Canadian carcass conversion factors during the investigation period.

On October 23, the USITC upheld its original finding of threat of injury from imports of Canadian pork. Canada filed for a re-investigation of the findings on November 7, with U.S. responses to follow within 7 days after the Canadian briefs are filed. The Binational Panel will issue a decision by January 22, 1991, which will be based on two factors, 1) was the ruling in accordance with law, and 2) was the decision supported by the data.

If the Panel upholds the USITC decision, Canada can mount an extraordinary challenge only if gross errors in the Panel ruling can be proven. If the Panel finds that the USITC decision fails to meet the two criteria, it can remand the case, with its concerns, back to the USITC for reconsideration. The process would then repeat itself.

However, in a separate but related action, the Panel also remanded the calculation of the duty deposit back to the U.S. Commerce Department for further consideration. The Dispute Settlement Panel refused to respond to Canada's request for a ruling on the legality of the "pass-

through provision" of the Omnibus Trade Act of 1985, which permits subsidies paid to hog producers to be passed through to pork products. The Panel stated that this is an issue for GATT and stated instead that, within the context of the law, the pass-through provision was correctly applied.

The Panel remanded 6 programs (including the Tripartite Stabilization Program) for further study. The Commerce Department had declared that the tripartite program for pork was differentiable from other tripartite programs and hence countervailable as a separate program. The Canadians claimed that the tripartite agreement program itself is not limited to specific commodities and therefore is not countervailable.

The Panel requested USDOC develop a test to determine the proportion of the sector aided by programs, availability of alternative assistance, and economic condition of the sector in the absence of the program. This would form a basis for determining if a program is targeted at a specific sector.

USDOC will respond by November 27 and its findings could have important implications for the duty. The Tripartite Stabilization Program is the major component of Canadian support and hence the duty. If USDOC finds that, as a result of its tests, the subsidy actually passed through to producers is too small to warrant a duty, the issue of threat of injury could become moot. Under this scenario, even if the threat of injury is upheld, the duty deposit would be eliminated. On the other hand, if the level of subsidy is upheld or at least found to be large enough to warrant a duty, the question of injury would have to be resolved before a duty deposit can be put in place.

## Cattle

### Pasture and Forage Conditions Improve

Forage prospects improved in October following an exceptionally warm, dry September. Pasture and range conditions improved more than seasonally during October and were rated at 71 on November 1, up from 69 in 1989; 70 on October 1, 1990; and 59 two years ago. California remained in the extreme drought range, while North Dakota continued in the severe drought range. Conditions were in the very poor range in parts of the Southeast and West—Alabama, Florida, Georgia, Louisiana, Mississippi, Idaho, Nevada, South Dakota, and Utah. Recent rains might improve grazing prospects for winter pasture in California and the deep South, but the more Northern dry areas will have to wait at least until spring for grazing conditions to improve.

Table 33--U.S. live hogs trade 1/

| Country        | Annual<br>1989 | January - August |       |                   |
|----------------|----------------|------------------|-------|-------------------|
|                |                | 1989             | 1990  | Percent<br>change |
|                |                | 1,000 head       |       | Percent           |
| Imports        |                |                  |       |                   |
| Canada         | 1073.2         | 768.4            | 630.5 | -17.9             |
| (Under 110 lb) | 169.4          | 107.8            | 144.4 | 33.9              |
| Total          | 1073.6         | 768.7            | 633.1 | -17.6             |
| Exports        |                |                  |       |                   |
| Mexico         | 78.1           | 66.0             | 29.7  | -55.0             |
| Other          | 15.2           | 10.4             | 7.3   | -29.6             |
| Total          | 93.3           | 76.4             | 37.0  | -51.5             |

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

In addition to improved grazing conditions in most areas, producers enter the 1990/91 winter season in a much stronger position to withstand higher supplemental feeding



Table 34--October 1 feeder cattle supply

| Item                            | 1988       | 1989   | 1990   | 1990/89        |
|---------------------------------|------------|--------|--------|----------------|
|                                 | 1,000 head |        |        | Percent change |
| Calves less than 500 lb, July 1 |            |        |        |                |
| On farms July 1                 | 31,000     | 30,900 | 30,800 | -0.3           |
| Slaughter July-Sept.            | 665        | 548    | 434    | -20.8          |
| On feed Oct. 1 1/               | 535        | 385    | 590    | 53.2           |
| Total                           | 29,800     | 29,967 | 29,776 | -0.6           |
| Steers & heifers 500 + lb 2/    |            |        |        |                |
| On farms July 1                 | 21,800     | 21,700 | 22,000 | 1.4            |
| Slaughter July-Sept.            | 7,457      | 6,980  | 6,911  | -1.0           |
| On feed Oct. 1 1/               | 9,814      | 9,346  | 10,003 | 7.0            |
| Total                           | 4,529      | 5,374  | 5,086  | -5.4           |
| Total Supply                    | 34,329     | 35,341 | 34,862 | -1.4           |

1/ Estimated U.S. steers and heifers. 2/ Not including heifers for cow replacement.

requirements. The annual hay production estimate was increased again in October and is reported to be 4 percent above a year earlier. Alfalfa production was up 11 percent, while other hay production declined 3 percent. The larger total hay crop, combined with the larger carryover stocks on May 1, provides hay supplies 10 percent above last year and 17 percent over 1988/89.

Even though hay supplies are larger, hay sales are possibly down as producers apparently are building up stocks to ensure a safety margin as the cow herd rebuilds. The farm price for all hay averaged \$86 a ton in October, up slightly from September and a year earlier. Increased production resulted in the alfalfa hay price being slightly below a year ago, while the price of other hay was \$3.50 a ton higher.

#### **Feeder Cattle Supplies Decline Slightly**

Feeder cattle supplies outside feedlots on October 1 were 1 percent below a year earlier. A continued sharp drop in calf slaughter was more than offset by a 53 percent rise in calves placed on feed this summer. Uncertain grazing conditions for fall and winter, early weaning, and high fed cattle prices were the main factors behind the large placements. This still leaves October 1 total calf supplies about unchanged from the past 3 years on this date, and together with continued large feeder cattle imports from Mexico and Canada, ensures that calf supplies are adequate to support increased fed cattle marketings in 1991.

Yearling cattle supplies were down 5 percent from a year earlier as cattle on feed in the 500 pound plus categories increased 7 percent. Overall, second-half 1990 placements likely will be little changed from last year's level, although the exaggerated placement pattern of 1989 has been moderated. Prospects for an outstanding wheat pasture grazing year resulted in lower summer placements in 1989. However, high expectations evaporated quickly last fall forcing a

large movement of cattle into feedlots. A more normal placement pattern is occurring for the last half of this year.

#### **October 1 Cattle on Feed Inventory Increases Sharply**

October 1 Cattle on feed inventory in the 13 reporting States was 9.1 million head, 110 percent of last year, the third highest since 1975. The summer-quarter placements were sharply above last year and coupled with reduced marketings, resulted in a greater than usual seasonal expansion from the July inventory on feed. A greater expansion was seen for steers on feed, up 13 percent from a year ago, than for heifers up 5 percent. The lightest weight categories, under 500 pound steers and heifers, showed unusually large year-to-year increases of 33 and 59 percent, respectively. Cattle on feed over 700 pound showed a more modest 3-percent increase from last year. The expanded number of lighter weight cattle on feed will require more days on feed than last year and will be market ready at lighter weights.

Fall-quarter marketing intentions from the 13 States are estimated at 5.5 million head, up 2 percent from a year ago. Placements this fall are expected to be well below year-ago levels as last year's placements were concentrated in the fall quarter. As a result, cattle on feed on January 1, 1991 could be little changed from a year earlier.

#### **Cattle Slaughter Down in 1990, Up in 1991**

Commercial cattle slaughter in 1990 is expected to be near 33.3 million head, 2 percent below a year ago. The slaughter mix has about the same number of steers and heifers as a year earlier but fewer cows. Cumulative cow slaughter this year through September was nearly 4.3 million head, 6 percent below a year ago. A greater decline was seen for dairy cows. The reduced cow slaughter suggests that herd rebuilding is under way due to favorable cow-calf returns and milk/feed price ratios. Next year, cattle slaughter is expected to increase by 1 to 2-percent above the 1990 level with similar increases in both fed cattle and cow slaughter.

Cattle slaughter this fall is expected to be unusually small at under 8.2 million head, 3-percent below last year, with the greatest reduction in cow slaughter, off around 12-percent. The October cattle slaughter was unusually small, given the extra slaughter day, compared with a year earlier.

#### **Increasing Carcass Weights Supports Beef Production**

During most of the 1980's, the trend of heavier dressed cattle weights has partly offset slaughter reductions. This trend can be attributed to fewer cows and nonfed cattle in the slaughter mix combined with increasing fed cattle weights. Dressed weights in 1990 are forecast to average 682 pounds per head, about 5 pound heavier than a year ago and 33 pounds more than 5 years earlier. Dressed weights in 1991 are expected to show less increase than this year, unchanged



Table 35--13-States cattle on feed, placements, marketings, and other disappearance

| Year | On<br>feed 1/<br>1,000<br>head | Percent<br>change 2/<br>Percent | Place-<br>ments<br>1,000<br>head | Percent<br>change 2/<br>Percent | Fed mar-<br>ketings<br>1,000<br>head | Percent<br>change 2/<br>Percent | Other dis-<br>appearance<br>1,000<br>head | Percent<br>change 2/<br>Percent |
|------|--------------------------------|---------------------------------|----------------------------------|---------------------------------|--------------------------------------|---------------------------------|---|---------------------------------|
| 1985 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 10,653                         | 7.5                             | 5,315                            | -3.6                            | 5,907                                | 3.4                             | 373                                       | 2.2                             |
| II   | 9,688                          | 3.7                             | 5,266                            | -5.7                            | 5,787                                | 3.0                             | 427                                       | -25.3                           |
| III  | 8,740                          | 0.1                             | 5,522                            | -11.8                           | 5,949                                | 4.7                             | 246                                       | -8.2                            |
| IV   | 8,067                          | -10.8                           | 7,500                            | -0.7                            | 5,269                                | -4.6                            | 314                                       | -24.7                           |
| Year | ---                            | ---                             | 23,603                           | -5.2                            | 22,912                               | 1.7                             | 1,360                                     | -16.2                           |
| 1986 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 9,984                          | -6.3                            | 5,270                            | -0.8                            | 5,763                                | -2.4                            | 316                                       | -15.3                           |
| II   | 9,175                          | -5.3                            | 5,221                            | -0.9                            | 5,821                                | 0.6                             | 375                                       | -12.2                           |
| III  | 8,200                          | -6.2                            | 6,376                            | 15.5                            | 5,926                                | -0.4                            | 233                                       | -8.2                            |
| IV   | 8,417                          | 4.3                             | 6,906                            | -7.9                            | 5,456                                | 3.5                             | 312                                       | -24.7                           |
| Year | ---                            | ---                             | 23,773                           | 0.7                             | 22,966                               | 0.2                             | 1,236                                     | -9.1                            |
| 1987 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 9,555                          | -4.3                            | 5,670                            | 7.6                             | 5,747                                | -0.3                            | 376                                       | 19.0                            |
| II   | 9,102                          | -0.8                            | 5,936                            | 13.7                            | 5,649                                | -3.0                            | 428                                       | 14.1                            |
| III  | 8,961                          | 9.3                             | 6,650                            | 4.3                             | 6,082                                | 2.6                             | 242                                       | -8.2                            |
| IV   | 9,287                          | 10.3                            | 6,818                            | -1.3                            | 5,648                                | 3.5                             | 343                                       | -24.7                           |
| Year | ---                            | ---                             | 25,074                           | 5.5                             | 23,126                               | 0.7                             | 1,389                                     | 12.4                            |
| 1988 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 10,114                         | 5.9                             | 5,824                            | 2.7                             | 5,853                                | 1.8                             | 390                                       | 3.7                             |
| II   | 9,695                          | 6.5                             | 5,913                            | -0.4                            | 5,879                                | 4.1                             | 423                                       | -1.2                            |
| III  | 9,306                          | 3.9                             | 6,031                            | -9.3                            | 6,261                                | 2.9                             | 225                                       | -8.2                            |
| IV   | 8,851                          | -4.7                            | 6,655                            | -2.4                            | 5,466                                | -3.2                            | 352                                       | -24.7                           |
| Year | ---                            | ---                             | 24,423                           | -2.6                            | 23,459                               | 1.4                             | 1,390                                     | 0.1                             |
| 1989 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 9,688                          | -4.2                            | 6,232                            | 7.0                             | 5,658                                | -3.3                            | 344                                       | -11.8                           |
| II   | 9,918                          | 2.3                             | 5,212                            | -11.9                           | 6,040                                | 2.7                             | 410                                       | -3.1                            |
| III  | 8,680                          | -6.7                            | 5,719                            | -5.2                            | 5,896                                | -5.8                            | 227                                       | -8.2                            |
| IV   | 8,276                          | -6.5                            | 7,321                            | 10.0                            | 5,361                                | -1.9                            | 293                                       | -24.7                           |
| Year | ---                            | ---                             | 24,484                           | 0.2                             | 22,955                               | -2.1                            | 1,274                                     | -8.3                            |
| 1990 |                                |                                 |                                  |                                 |                                      |                                 |   |                                 |
| I    | 9,943                          | 2.6                             | 6,088                            | -2.3                            | 5,583                                | -1.3                            | 385                                       | 11.9                            |
| II   | 10,063                         | 1.5                             | 5,111                            | -1.9                            | 6,013                                | -0.4                            | 400                                       | -2.4                            |
| III  | 8,761                          | 0.9                             | 6,343                            | 10.9                            | 5,741                                | -2.6                            | 261                                       | 15.0                            |

1/ Beginning of quarter. 2/ Percent change from previous year. 3/ Expected marketings.

Table 36--Cattle on feed, placements, and marketings, 13 States

| Item                            | 1988  | 1989       | 1990     | 1990/89        |
|---------------------------------|-------|------------|----------|----------------|
|                                 |       | 1,000 head |          | Percent change |
| On feed July 1                  | 9,306 | 8,680      | 8,761    | 1              |
| Placements, July-Sept.          | 6,031 | 5,719      | 6,343    | 11             |
| Marketings, July-Sept.          | 6,261 | 5,896      | 5,906    | 0              |
| Other disappearance, July-Sept. | 225   | 227        | 261      | 15             |
| On feed October 1               |       |            |          |                |
| Steers & steer calves           |       |            |          |                |
| -500 lb                         | 322   | 229        | 346      | 51             |
| 500-699 lb                      | 612   | 584        | 876      | 50             |
| 700-899 lb                      | 1,901 | 1,564      | 1,732    | 11             |
| 900-1,099 lb                    | 2,100 | 1,919      | 2,037    | 6              |
| 1,100 + lb                      | 800   | 955        | 927      | -3             |
| Heifers & heifer calves         |       |            |          |                |
| -500 lb                         | 134   | 97         | 159      | 64             |
| 500-699 lb                      | 547   | 471        | 595      | 26             |
| 700-899 lb                      | 1,354 | 1,201      | 1,256    | 5              |
| 900 + lb                        | 1,047 | 1,221      | 1,134    | -7             |
| 900-1,099                       | NA    | 1,055      | 1,004    | -5             |
| 1,100 + lb                      | NA    | 166        | 130      | -22            |
| Cows                            | 34    | 35         | 40       | 14             |
| Marketings, Oct.-Dec.           | 5,466 | 5,361      | 5,495 1/ | 2              |

1/ Expected.

Beef production for 1990 is forecast to be 22.7 billion pounds, 1 percent below last year with the greatest year-to-year reduction in the fall quarter. Beef production in 1991 is forecast to increase about 1 percent with the greater year-over-year expansion during the second half.

Per capita beef consumption has trended downward during the 1980's to about 67.7 pound projected for 1990, off about 2 percent from a year earlier. Next year, per capita beef consumption is expected to stabilize as domestic production about offsets population growth and minor changes likely in imports and exports relative to a year earlier. Fed beef consumption has remained fairly stable as much of the reduction has been in processing type beef from nonfed slaughter.

#### Veal Slaughter and Production Decline Sharply

Tight supplies and high prices for stocker and feeder cattle are seen as bidding increasing numbers of calves out of veal slaughter channels. Cumulative veal calf slaughter for the first nine months of 1990 was 1.35 million head, 17 percent below a year earlier, with veal production off 10 percent. The sharp increase in average veal carcass weight was due to the greater decline in young calf slaughter than seen for heavier weight formula fed veal calves. For all of 1990, veal production is expected to be off 9 percent from last year. Veal production is expected to decline around 7 percent in 1991.

to up 2 pounds, as the percentage of cows in the slaughter mix stabilizes and fed cattle market weights likely to plateau.



Table 37--7-States cattle on feed, placements, and marketings

| Year  | On<br>feed    | Percent<br>change 1/ | Net<br>placements | Percent<br>change 1/ | Marketings    | Percent<br>change 1/ | Other dis-<br>appearance | Percent<br>change 1/ |
|-------|---------------|----------------------|-------------------|----------------------|---------------|----------------------|--------------------------|----------------------|
|       | 1,000<br>head | Percent              | 1,000<br>head     | Percent              | 1,000<br>head | Percent              | 1,000<br>head            | Percent              |
| 1988  |               |                      |                   |                      |               |                      |                          |                      |
| Jan.  | 8,411         | 5.8                  | 1,557             | 7.1                  | 1,764         | -1.6                 | 106                      | -16.5                |
| Feb.  | 8,204         | 7.7                  | 1,253             | -6.3                 | 1,545         | 4.5                  | 126                      | 20.0                 |
| Mar.  | 7,912         | 5.9                  | 1,737             | 6.9                  | 1,593         | 1.4                  | 111                      | 18.1                 |
| Apr.  | 8,056         | 7.0                  | 1,382             | -11.5                | 1,609         | 4.4                  | 139                      | 0.0                  |
| May   | 7,829         | 3.7                  | 2,029             | 10.2                 | 1,724         | 13.9                 | 146                      | 2.1                  |
| June  | 8,134         | 3.3                  | 1,319             | -1.9                 | 1,717         | -0.9                 | 68                       | -21.8                |
| July  | 7,736         | 3.3                  | 1,189             | -2.4                 | 1,785         | 3.6                  | 62                       | -12.7                |
| Aug.  | 7,140         | 2.2                  | 1,594             | -13.7                | 1,790         | 3.3                  | 66                       | -2.9                 |
| Sept. | 6,944         | -2.2                 | 2,142             | -10.9                | 1,682         | 0.7                  | 67                       | -5.6                 |
| Oct.  | 7,404         | -5.4                 | 2,366             | -6.4                 | 1,576         | -7.3                 | 84                       | -1.2                 |
| Nov.  | 8,194         | -5.4                 | 1,578             | 0.4                  | 1,517         | 2.6                  | 112                      | 3.7                  |
| Dec.  | 8,255         | -5.7                 | 1,306             | 2.8                  | 1,516         | -6.0                 | 115                      | -3.4                 |
| 1989  |               |                      |                   |                      |               |                      |                          |                      |
| Jan.  | 8,045         | -4.4                 | 1,602             | 2.9                  | 1,677         | -4.9                 | 104                      | -1.9                 |
| Feb.  | 7,970         | -2.9                 | 1,495             | 19.3                 | 1,534         | -0.7                 | 115                      | -8.7                 |
| Mar.  | 7,931         | 0.2                  | 1,900             | 9.4                  | 1,579         | -0.9                 | 75                       | -32.4                |
| Apr.  | 8,252         | 2.4                  | 1,415             | 2.4                  | 1,580         | -1.8                 | 124                      | -10.8                |
| May   | 8,087         | 3.3                  | 1,460             | -28.0                | 1,752         | 1.6                  | 164                      | 12.3                 |
| June  | 7,795         | -4.2                 | 1,231             | -6.7                 | 1,791         | 4.3                  | 62                       | -8.8                 |
| July  | 7,235         | -6.5                 | 1,228             | 3.3                  | 1,700         | -4.8                 | 63                       | 1.6                  |
| Aug.  | 6,763         | -5.3                 | 1,562             | -2.0                 | 1,694         | -5.4                 | 76                       | 15.2                 |
| Sept. | 6,631         | -4.5                 | 1,906             | -11.0                | 1,579         | -6.1                 | 47                       | -29.9                |
| Oct.  | 6,958         | -6.0                 | 2,581             | 9.1                  | 1,628         | 3.3                  | 71                       | -15.5                |
| Nov.  | 7,911         | -3.5                 | 1,910             | 21.0                 | 1,490         | -1.8                 | 91                       | -18.8                |
| Dec.  | 8,331         | 0.9                  | 1,465             | 12.2                 | 1,418         | -6.5                 | 87                       | -24.3                |
| 1990  |               |                      |                   |                      |               |                      |                          |                      |
| Jan.  | 8,378         | 4.1                  | 1,782             | 11.2                 | 1,634         | -2.6                 | 114                      | 9.6                  |
| Feb.  | 8,526         | 7.0                  | 1,308             | -12.5                | 1,515         | -1.2                 | 95                       | -17.4                |
| Mar.  | 8,319         | 4.9                  | 1,782             | -6.2                 | 1,618         | 2.5                  | 120                      | 60.0                 |
| Apr.  | 8,483         | 2.8                  | 1,252             | -11.5                | 1,554         | -1.6                 | 125                      | 0.8                  |
| May   | 8,181         | 1.2                  | 1,482             | 1.5                  | 1,796         | 2.5                  | 150                      | -8.5                 |
| June  | 7,867         | 0.9                  | 1,267             | 2.9                  | 1,824         | 1.8                  | 73                       | 17.7                 |
| July  | 7,310         | 1.0                  | 1,443             | 17.5                 | 1,750         | 2.9                  | 77                       | 22.2                 |
| Aug.  | 7,003         | 3.5                  | 1,653             | 5.8                  | 1,666         | -1.7                 | 82                       | 7.9                  |
| Sept. | 6,990         | 5.4                  | 2,135             | 12.0                 | 1,445         | -8.5                 | 79                       | 68.1                 |
| Oct.  | 7,680         | 10.4                 |                   |                      |               |                      |                          |                      |

1/ Percent change is from previous year.

### Modestly Higher Cattle and Beef Prices in 1991

Omaha Choice steer prices this year are expected to average about \$76.50 per hundred weight, about \$4.00 higher than a year ago. Cattle prices are expected to advance \$1 to \$2 next year with the highest prices likely in the spring quarter. Feeder cattle prices are expected to be supported due to tight supplies, little change in cost of gain in feedlots, and higher fed cattle prices. Due to favorable cow-calf returns, Utility cow prices are expected to increase only slightly as replacement cows are bid out of slaughter channels. Retail Choice Beef prices are expected to average about \$2.79 per pound in 1990, up 5 percent or 13 cents per pound from last year, with a further modest 2 to 4 cents gain likely next year. However, given the record large meat supplies expected for 1991 and the greater economic uncertainties, greater downside risks are seen than upside potential.

### U.S. Beef and Cattle Trade

#### U.S. Beef and Veal Imports Rising

Estimates for 1990 imports have been revised upward because of continuing strong imports from Australia. Imports from all sources are likely to reach over 2.3 billion

pounds, carcass weight, in 1990. In 1991, imports are forecast to be down slightly.

Australian slaughter was up 14 percent for the period July 1989-June 1990 over the same period the previous year, as dry conditions in late 1989 forced additional slaughter. Attractive U.S. prices and a slowdown in Japanese imports directed more Australian beef to the U.S. market. U.S. imports for the fourth quarter of 1989 and first quarter of 1990 were up 15 percent over the same periods a year earlier. However, U.S. stocks of frozen imported beef began to build and import prices dropped at the end of February.

It had earlier been expected that U.S. imports from Australia would drop as Australian slaughter levels declined from drought-increased highs, and as Australia and the United States shipped additional quantities into Japan. This was not to be the case, however, as exports from both countries to Japan flagged. Australian exports to the United States have remained above last year through mid-October.

If Japan attempts to increase imports late in 1990 and early in 1991 to meet intentions under the beef import agreement, Australian shipments to Japan could increase and shipments to the United States decline in early 1991. Slaughter levels



Table 38--Calf slaughter by class under Federal inspection

|            | Bob veal       | Fed                |                       | Other       |         |
|------------|----------------|--------------------|-----------------------|-------------|---------|
| Year       | 150 lb & below | Formula 150-400 lb | Nonformula 150-400 lb | over 400 lb | Total   |
| -----      |                |                    |                       |             |         |
| 1,000 head |                |                    |                       |             |         |
| 1986       | 1,618.6        | 1,009.3            | 285.9                 | 281.0       | 3,194.8 |
| 1987       | 1,207.8        | 1,002.7            | 171.4                 | 297.5       | 2,679.4 |
| 1988       |                |                    |                       |             |         |
| Jan.       | 92.5           | 82.0               | 12.5                  | 18.1        | 205.1   |
| Feb.       | 86.5           | 84.9               | 16.2                  | 15.2        | 202.8   |
| Mar.       | 96.3           | 92.8               | 11.4                  | 15.3        | 215.8   |
| Apr.       | 65.3           | 78.7               | 10.8                  | 14.3        | 169.1   |
| May        | 58.1           | 80.7               | 17.1                  | 15.4        | 171.3   |
| Jun.       | 82.1           | 90.4               | 14.2                  | 17.1        | 203.8   |
| July       | 106.3          | 74.2               | 14.1                  | 12.4        | 207.0   |
| Aug.       | 111.7          | 86.3               | 12.2                  | 16.7        | 226.9   |
| Sept.      | 92.7           | 85.0               | 13.1                  | 16.5        | 207.3   |
| Oct.       | 84.6           | 84.7               | 11.9                  | 15.8        | 197.0   |
| Nov.       | 94.7           | 81.4               | 11.3                  | 14.1        | 201.5   |
| Dec.       | 95.1           | 82.2               | 11.1                  | 14.2        | 202.6   |
| Year       | 1,065.9        | 1,003.3            | 155.9                 | 185.1       | 2,410.2 |
| 1989       |                |                    |                       |             |         |
| Jan.       | 83.4           | 83.6               | 10.3                  | 18.3        | 195.6   |
| Feb.       | 75.7           | 76.6               | 7.7                   | 15.3        | 175.3   |
| Mar.       | 83.1           | 84.6               | 9.9                   | 16.7        | 194.3   |
| Apr.       | 46.3           | 74.5               | 7.3                   | 23.9        | 152.0   |
| May        | 54.7           | 77.9               | 9.3                   | 15.4        | 157.3   |
| June       | 56.4           | 81.6               | 8.1                   | 15.1        | 161.2   |
| July       | 97.1           | 82.8               | 10.3                  | 16.6        | 206.8   |
| Aug.       | 87.8           | 76.1               | 8.3                   | 16.9        | 189.1   |
| Sept.      | 77.3           | 68.4               | 10.6                  | 16.7        | 173.0   |
| Oct.       | 80.6           | 86.7               | 11.2                  | 12.2        | 190.7   |
| Nov.       | 81.6           | 70.5               | 10.5                  | 12.4        | 175.0   |
| Dec.       | 74.2           | 70.5               | 8.9                   | 13.3        | 166.9   |
| Year       | 898.2          | 933.8              | 112.4                 | 192.8       | 2,137.2 |
| 1990       |                |                    |                       |             |         |
| Jan.       | 73.4           | 77.5               | 12.1                  | 11.8        | 174.8   |
| Feb.       | 58.0           | 66.1               | 8.1                   | 12.9        | 145.1   |
| Mar.       | 66.4           | 79.6               | 8.1                   | 11.0        | 165.1   |
| Apr.       | 42.8           | 67.3               | 8.2                   | 9.4         | 127.7   |
| May        | 38.9           | 81.7               | 7.3                   | 8.9         | 136.8   |
| June       | 41.4           | 69.1               | 9.9                   | 11.2        | 131.6   |
| July       | 53.7           | 69.0               | 6.5                   | 9.5         | 138.7   |
| Aug.       | 56.6           | 68.8               | 9.0                   | 12.5        | 146.9   |
| Sept.      | 51.5           | 60.4               | 7.2                   | 13.2        | 132.3   |

Table 39--Commercial calf slaughter and production

| Year | Slaughter  | Dressed weight | Production     |
|------|------------|----------------|----------------|
|      | 1,000 head | Pounds         | Million pounds |
| 1986 |            |                |                |
| I    | 873        | 148            | 129            |
| II   | 836        | 154            | 129            |
| III  | 859        | 150            | 129            |
| IV   | 839        | 145            | 122            |
| Year | 3,408      | 149            | 509            |
| 1987 |            |                |                |
| I    | 760        | 147            | 112            |
| II   | 651        | 155            | 101            |
| III  | 684        | 145            | 99             |
| IV   | 720        | 144            | 104            |
| Year | 2,815      | 148            | 416            |
| 1988 |            |                |                |
| I    | 647        | 150            | 97             |
| II   | 567        | 162            | 92             |
| III  | 665        | 149            | 99             |
| IV   | 627        | 158            | 99             |
| Year | 2,506      | 154            | 387            |
| 1989 |            |                |                |
| I    | 583        | 156            | 91             |
| II   | 488        | 174            | 85             |
| III  | 548        | 153            | 84             |
| IV   | 553        | 152            | 84             |
| Year | 2,172      | 158            | 344            |
| 1990 |            |                |                |
| I    | 502        | 157            | 79             |
| II   | 411        | 180            | 74             |
| III  | 434        | 184            | 80             |

in Australia are expected to decline in 1991 with more normal seasonal conditions. While Australian beef exports could increase to Japan and decrease to the United States in early 1991, the large carry-over in Japan of frozen beef stocks is likely to reduce demand and total Australian beef exports are forecast to be down in 1991.

New Zealand ships about 75 percent of their exports to the United States. Exports have been down as producers increased cattle inventories after distress slaughter because of drought in 1989. Exports next year may increase only slightly.

As of June 1, 1990, Brazil lost their residue certification from the USDA Food Safety and Inspection Service, thus imports from Brazil have ceased. Under U.S. law, countries without an acceptable residue testing program can not export to the United States. Because of lack of funds for its laboratories, Brazil did not produce residue samples for products to be exported to the United States. Imports from Argentina of canned corned beef will likely increase as a result. Consequently, U.S. import forecasts are expected to be only minimally affected.

#### *Future Uncertain for U.S. Beef and Veal Exports*

Beginning in April 1991, beef exports to Japan will no longer be regulated by Japan's Livestock Industry Promotion Corporation (LIPC) nor be under a quota agreement. LIPC surcharges will be eliminated. However, the ad valorem import tariff will be increased from 25 percent to 70 percent in April 1991, then reduced to 60 percent the next year, and reduced further to 50 percent in April 1993. These pending changes introduce a greater degree of uncertainty for exporters. Previously, beef imports were allocated by the LIPC, which was required to purchase a larger quantity each year. Now the market will be open for Japanese buyers to contact exporters directly. This open contact could be a boon for exporters because it increases the opportunities to tailor products to Japanese buyers rather than be limited by the LIPC.

The publicity surrounding the signing of the agreement and the subsequent promotions in Japan for imported beef have generated much interest. Beef purchases increased substantially, especially of the more expensive grain-fed beef. The Japanese give a lot of expensive gifts, and the novelty of imported beef increased its desirability.

The new freedom to increase imports also means there is no agreement to purchase a minimum amount. So uncertainty on purchases will increase until beef moves from a specialty product to a staple part of the diet consumed at home such as pork, poultry, or seafood. Accumulated stocks of beef also raises uncertainty about future purchases.

About three-fourths of U.S. beef and veal exports go to Japan. Under the Beef and Citrus Agreement, Japan agreed

(continued on page 31)



Table 40--Federally inspected cattle slaughter

| Week ended          | Cattle |      |      | Steers |      |      | Cows  |      |      |       |      |      |             |      |      |
|---------------------|--------|------|------|--------|------|------|-------|------|------|-------|------|------|-------------|------|------|
|                     |        |      |      |        |      |      | Total |      |      | Dairy |      |      | Dairy/total |      |      |
|                     | 1988   | 1989 | 1990 | 1988   | 1989 | 1990 | 1988  | 1989 | 1990 | 1988  | 1989 | 1990 | 1988        | 1989 | 1990 |
| -----Thousands----- |        |      |      |        |      |      |       |      |      |       |      |      |             |      |      |
| -----Percent-----   |        |      |      |        |      |      |       |      |      |       |      |      |             |      |      |
| Jan. 6              | 664    | 543  | 548  | 328    | 256  | 263  | 131   | 119  | 120  | 64    | 64   | 57   | 49          | 54   | 48   |
| 13                  | 723    | 627  | 622  | 359    | 290  | 282  | 126   | 131  | 147  | 62    | 68   | 69   | 49          | 52   | 47   |
| 20                  | 703    | 654  | 599  | 353    | 313  | 281  | 126   | 129  | 132  | 60    | 65   | 61   | 48          | 50   | 46   |
| 27                  | 675    | 641  | 637  | 340    | 310  | 318  | 119   | 123  | 119  | 57    | 61   | 59   | 48          | 50   | 49   |
| Feb. 3              | 646    | 625  | 638  | 335    | 300  | 309  | 116   | 114  | 122  | 58    | 60   | 60   | 50          | 53   | 49   |
| 10                  | 639    | 605  | 622  | 332    | 300  | 304  | 106   | 104  | 115  | 55    | 57   | 60   | 52          | 55   | 52   |
| 17                  | 637    | 641  | 601  | 316    | 316  | 300  | 118   | 119  | 102  | 59    | 64   | 53   | 50          | 54   | 52   |
| 24                  | 640    | 628  | 594  | 314    | 309  | 300  | 121   | 108  | 104  | 60    | 62   | 56   | 49          | 57   | 54   |
| Mar. 3              | 616    | 639  | 592  | 304    | 316  | 295  | 114   | 114  | 109  | 56    | 62   | 56   | 49          | 54   | 51   |
| 10                  | 609    | 600  | 613  | 298    | 312  | 312  | 105   | 104  | 103  | 54    | 58   | 55   | 52          | 56   | 54   |
| 17                  | 622    | 588  | 621  | 307    | 288  | 315  | 106   | 119  | 104  | 54    | 61   | 57   | 51          | 51   | 54   |
| 24                  | 607    | 584  | 609  | 304    | 286  | 306  | 108   | 114  | 110  | 53    | 56   | 56   | 49          | 49   | 51   |
| 31                  | 617    | 587  | 608  | 316    | 286  | 307  | 106   | 111  | 108  | 51    | 57   | 55   | 48          | 51   | 51   |
| Apr. 7              | 600    | 609  | 592  | 310    | 300  | 302  | 101   | 118  | 105  | 50    | 57   | 51   | 50          | 48   | 49   |
| 14                  | 619    | 646  | 595  | 315    | 335  | 303  | 110   | 117  | 104  | 54    | 56   | 50   | 49          | 48   | 49   |
| 21                  | 670    | 663  | 627  | 349    | 332  | 326  | 108   | 122  | 102  | 50    | 56   | 48   | 46          | 46   | 47   |
| 28                  | 674    | 652  | 625  | 356    | 332  | 325  | 109   | 122  | 109  | 50    | 54   | 51   | 46          | 44   | 47   |
| May 5               | 664    | 666  | 617  | 358    | 326  | 322  | 104   | 128  | 102  | 46    | 56   | 49   | 44          | 44   | 48   |
| 12                  | 664    | 670  | 684  | 344    | 339  | 352  | 109   | 118  | 105  | 47    | 50   | 48   | 43          | 43   | 46   |
| 19                  | 682    | 675  | 681  | 348    | 344  | 354  | 118   | 115  | 112  | 48    | 50   | 49   | 41          | 44   | 44   |
| 26                  | 689    | 673  | 667  | 355    | 342  | 347  | 125   | 115  | 109  | 52    | 50   | 47   | 42          | 44   | 43   |
| June 2              | 575    | 589  | 592  | 298    | 301  | 311  | 96    | 99   | 91   | 39    | 42   | 39   | 41          | 43   | 42   |
| 9                   | 681    | 663  | 665  | 336    | 328  | 339  | 120   | 114  | 104  | 50    | 49   | 44   | 42          | 43   | 42   |
| 16                  | 678    | 680  | 674  | 338    | 339  | 349  | 129   | 113  | 101  | 53    | 49   | 41   | 41          | 43   | 41   |
| 23                  | 678    | 658  | 662  | 344    | 331  | 341  | 120   | 109  | 103  | 50    | 48   | 45   | 42          | 44   | 44   |
| 30                  | 682    | 671  | 664  | 348    | 329  | 340  | 119   | 112  | 108  | 50    | 50   | 44   | 42          | 44   | 40   |
| July 7              | 609    | 564  | 555  | 306    | 288  | 289  | 108   | 79   | 77   | 51    | 37   | 33   | 48          | 47   | 43   |
| 14                  | 724    | 691  | 671  | 341    | 335  | 339  | 135   | 122  | 113  | 62    | 56   | 48   | 46          | 46   | 42   |
| 21                  | 691    | 672  | 673  | 359    | 326  | 334  | 116   | 115  | 106  | 55    | 55   | 45   | 47          | 48   | 43   |
| 28                  | 694    | 638  | 647  | 346    | 312  | 333  | 112   | 106  | 95   | 57    | 52   | 44   | 51          | 49   | 46   |
| Aug. 4              | 678    | 644  | 617  | 339    | 326  | 322  | 111   | 104  | 96   | 54    | 53   | 44   | 49          | 51   | 46   |
| 11                  | 694    | 673  | 646  | 346    | 332  | 662  | 112   | 107  | 98   | 56    | 54   | 47   | 50          | 50   | 48   |
| 18                  | 688    | 652  | 646  | 337    | 315  | 326  | 115   | 112  | 104  | 54    | 53   | 48   | 47          | 47   | 46   |
| 25                  | 678    | 630  | 646  | 328    | 304  | 319  | 121   | 114  | 108  | 58    | 56   | 50   | 48          | 49   | 46   |
| Sept 1              | 703    | 646  | 636  | 326    | 316  | 311  | 116   | 111  | 109  | 55    | 57   | 53   | 47          | 51   | 49   |
| 8                   | 614    | 562  | 636  | 288    | 277  | 287  | 101   | 97   | 93   | 49    | 49   | 44   | 49          | 51   | 47   |
| 15                  | 692    | 657  | 662  | 333    | 327  | 323  | 124   | 118  | 113  | 58    | 58   | 55   | 47          | 49   | 49   |
| 22                  | 672    | 666  | 643  | 332    | 316  | 301  | 119   | 117  | 112  | 58    | 56   | 51   | 49          | 48   | 46   |
| 29                  | 667    | 670  | 656  | 316    | 324  | 324  | 118   | 120  | 112  | 58    | 56   | 51   | 49          | 46   | 46   |
| Oct. 6              | 674    | 660  | 625  | 309    | 310  | 285  | 125   | 126  | 111  | 56    | 57   | 53   | 46          | 45   | 47   |
| 13                  | 680    | 663  | 635  | 311    | 309  | 306  | 127   | 128  | 118  | 56    | 57   | 53   | 44          | 45   | 45   |
| 20                  | 673    | 648  | 627  | 312    | 304  | 298  | 132   | 132  | 126  | 58    | 57   | 55   | 44          | 43   | 44   |
| 27                  | 676    | 652  | 621  | 310    | 297  | 299  | 143   | 142  | 131  | 64    | 60   | 56   | 45          | 42   | 42   |
| Nov. 3              | 656    | 643  |      | 304    | 292  |      | 140   | 139  |      | 62    | 61   |      | 44          | 44   |      |
| 10                  | 621    | 630  |      | 298    | 292  |      | 134   | 139  |      | 62    | 59   |      | 46          | 42   |      |
| 17                  | 623    | 635  |      | 286    | 292  |      | 140   | 143  |      | 63    | 60   |      | 45          | 42   |      |
| 24                  | 546    | 533  |      | 260    | 252  |      | 110   | 111  |      | 51    | 47   |      | 46          | 42   |      |
| Dec. 1              | 648    | 660  |      | 298    | 301  |      | 145   | 146  |      | 67    | 62   |      | 46          | 43   |      |
| 8                   | 624    | 644  |      | 300    | 299  |      | 140   | 149  |      | 66    | 63   |      | 47          | 42   |      |
| 15                  | 623    | 635  |      | 306    | 304  |      | 126   | 133  |      | 62    | 58   |      | 50          | 44   |      |
| 22                  | 622    | 625  |      | 305    | 298  |      | 116   | 124  |      | 58    | 53   |      | 50          | 43   |      |
| 29                  | 549    | 542  |      | 281    | 274  |      | 90    | 99   |      | 46    | 42   |      | 51          | 42   |      |

1/ Corresponding dates to 1990: 1988, Jan. 9, 1989, Jan. 7.



Table 41--Commercial cattle slaughter 1/ and production

| Year                 | Steers and heifers |        |        | Total<br>Cows | Bulls and<br>stags | Total  | Dressed<br>weight | Commercial<br>production |
|----------------------|--------------------|--------|--------|---------------|--------------------|--------|-------------------|--------------------------|
|                      | Fed                | Nonfed | Total  |               |                    |        |                   |                          |
| -----1,000 head----- |                    |        |        |               |                    |        | Pounds            | Million pounds           |
| 1984                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,467              | 458    | 6,925  | 2,081         | 164                | 9,169  | 623               | 5,710                    |
| II                   | 6,476              | 660    | 7,136  | 1,998         | 209                | 9,343  | 623               | 5,820                    |
| III                  | 6,556              | 620    | 7,176  | 2,169         | 218                | 9,563  | 622               | 5,952                    |
| IV                   | 6,259              | 678    | 6,937  | 2,374         | 196                | 9,507  | 624               | 5,936                    |
| Year                 | 25,758             | 2,416  | 28,174 | 8,622         | 787                | 37,582 | 623               | 23,418                   |
| 1985                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,678              | 209    | 6,887  | 1,879         | 170                | 8,936  | 637               | 5,692                    |
| II                   | 6,663              | 540    | 7,203  | 1,629         | 195                | 9,027  | 656               | 5,923                    |
| III                  | 6,863              | 604    | 7,467  | 1,692         | 195                | 9,353  | 659               | 6,167                    |
| IV                   | 5,977              | 611    | 6,588  | 2,190         | 199                | 8,977  | 643               | 5,775                    |
| Year                 | 26,181             | 1,964  | 28,145 | 7,390         | 759                | 36,293 | 649               | 23,557                   |
| 1986                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,507              | 327    | 6,834  | 1,885         | 165                | 8,884  | 649               | 5,769                    |
| II                   | 6,700              | 685    | 7,385  | 2,006         | 181                | 9,572  | 653               | 6,246                    |
| III                  | 6,836              | 684    | 7,520  | 1,941         | 191                | 9,652  | 650               | 6,273                    |
| IV                   | 6,192              | 682    | 6,874  | 2,129         | 177                | 9,180  | 645               | 5,925                    |
| Year                 | 26,235             | 2,378  | 28,613 | 7,961         | 714                | 37,288 | 649               | 24,213                   |
| 1987                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,507              | 443    | 6,950  | 1,652         | 163                | 8,765  | 656               | 5,754                    |
| II                   | 6,510              | 586    | 7,096  | 1,603         | 179                | 8,878  | 646               | 5,737                    |
| III                  | 7,011              | 395    | 7,406  | 1,636         | 181                | 9,223  | 657               | 6,064                    |
| IV                   | 6,401              | 495    | 6,896  | 1,719         | 166                | 8,781  | 666               | 5,850                    |
| Year                 | 26,429             | 1,919  | 28,348 | 6,610         | 689                | 35,647 | 657               | 23,405                   |
| 1988                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,621              | 279    | 6,900  | 1,529         | 152                | 8,581  | 664               | 5,700                    |
| II                   | 6,777              | 314    | 7,091  | 1,504         | 164                | 8,759  | 660               | 5,784                    |
| III                  | 7,209              | 249    | 7,458  | 1,575         | 167                | 9,200  | 672               | 6,185                    |
| IV                   | 6,192              | 457    | 6,649  | 1,729         | 161                | 8,539  | 674               | 5,755                    |
| Year                 | 26,799             | 1,299  | 28,098 | 6,337         | 644                | 35,079 | 668               | 23,424                   |
| 1989                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,390              | 97     | 6,487  | 1,550         | 143                | 8,180  | 676               | 5,530                    |
| II                   | 6,960              | 26     | 6,986  | 1,541         | 168                | 8,695  | 664               | 5,777                    |
| III                  | 6,788              | 191    | 6,979  | 1,460         | 175                | 8,614  | 684               | 5,893                    |
| IV                   | 6,071              | 420    | 6,491  | 1,765         | 172                | 8,428  | 685               | 5,774                    |
| Year                 | 26,209             | 734    | 26,943 | 6,316         | 658                | 33,917 | 677               | 22,974                   |
| 1990                 |                    |        |        |               |                    |        |                   |                          |
| I                    | 6,308              | 123    | 6,431  | 1,533         | 153                | 8,117  | 678               | 5,507                    |
| II                   | 6,902              | 89     | 6,991  | 1,386         | 165                | 8,542  | 671               | 5,733                    |
| III                  | 6,611              | 299    | 6,910  | 1,368         | 171                | 8,449  | 688               | 5,814                    |

1/ Classes estimated.

Table 42--Beef, Choice Yield Grade 3: Retail, wholesale, and farm values, spreads, and farmers' share 1/

| Year                      | Retail price 2/ | Wholesale value 3/ | Gross farm value 4/ | By-product allow-<br>ance 5/ | Net farm value 6/ | Farm retail-spread |                  |                | Farmers' Share 7/ |
|---------------------------|-----------------|--------------------|---------------------|------------------------------|-------------------|--------------------|------------------|----------------|-------------------|
|                           |                 |                    |                     |                              |                   | Total              | Wholesale-retail | Farm wholesale |                   |
| -----Cents per pound----- |                 |                    |                     |                              |                   |                    |                  |                | Percent           |
| 1985                      | 228.6           | 148.8              | 142.2               | 14.8                         | 127.4             | 101.2              | 79.8             | 21.4           | 56                |
| 1986                      | 226.8           | 146.5              | 140.0               | 15.0                         | 125.0             | 101.8              | 80.3             | 21.5           | 55                |
| 1987                      | 238.4           | 160.0              | 157.6               | 18.9                         | 138.7             | 99.7               | 78.4             | 21.3           | 58                |
| 1988                      | 250.3           | 169.4              | 169.4               | 21.1                         | 148.3             | 102.0              | 80.9             | 21.1           | 59                |
| I                         | 241.7           | 164.1              | 166.0               | 22.3                         | 143.7             | 98.0               | 77.6             | 20.4           | 59                |
| II                        | 250.1           | 176.6              | 176.2               | 22.2                         | 154.0             | 96.1               | 73.5             | 22.6           | 62                |
| III                       | 254.5           | 164.7              | 163.8               | 20.7                         | 143.1             | 111.4              | 89.8             | 21.6           | 56                |
| IV                        | 255.0           | 172.3              | 171.4               | 19.2                         | 152.2             | 102.8              | 82.7             | 20.1           | 60                |
| 1989                      | 265.7           | 176.8              | 177.6               | 20.0                         | 157.6             | 108.1              | 88.9             | 19.2           | 59                |
| I                         | 260.7           | 177.3              | 179.6               | 19.7                         | 159.9             | 100.8              | 83.4             | 17.4           | 61                |
| II                        | 267.0           | 180.4              | 179.5               | 19.3                         | 160.2             | 106.8              | 86.6             | 20.2           | 60                |
| III                       | 268.0           | 172.5              | 171.3               | 20.1                         | 151.2             | 116.8              | 95.5             | 21.3           | 56                |
| IV                        | 266.9           | 176.8              | 180.1               | 21.2                         | 158.9             | 108.0              | 90.1             | 17.9           | 60                |
| 1990                      |                 |                    |                     |                              |                   |                    |                  |                |                   |
| Jan.                      | 274.4           | 187.1              | 189.4               | 21.8                         | 167.6             | 106.8              | 87.3             | 19.5           | 61                |
| Feb.                      | 271.0           | 186.0              | 188.7               | 21.5                         | 167.2             | 103.8              | 85.0             | 18.8           | 62                |
| Mar.                      | 272.5           | 187.7              | 190.4               | 21.1                         | 169.3             | 103.2              | 84.8             | 18.4           | 62                |
| I                         | 272.6           | 186.9              | 189.5               | 21.5                         | 168.0             | 104.6              | 85.7             | 18.9           | 62                |
| Apr.                      | 277.9           | 190.1              | 192.0               | 21.2                         | 170.8             | 107.1              | 87.8             | 19.3           | 61                |
| May                       | 283.6           | 191.6              | 187.9               | 20.7                         | 167.2             | 116.4              | 92.0             | 24.4           | 59                |
| June                      | 282.1           | 187.8              | 184.2               | 20.3                         | 163.9             | 118.2              | 94.3             | 23.9           | 58                |
| II                        | 281.2           | 189.8              | 188.0               | 20.7                         | 167.3             | 113.9              | 91.4             | 22.5           | 59                |
| July                      | 279.9           | 183.3              | 180.6               | 20.1                         | 160.5             | 119.4              | 96.6             | 22.8           | 57                |
| Aug.                      | 280.6           | 187.8              | 186.6               | 19.9                         | 166.7             | 113.9              | 92.8             | 21.1           | 59                |
| Sept.                     | 180.6           | 187.3              | 186.8               | 20.0                         | 166.8             | 113.8              | 93.3             | 20.5           | 59                |
| III                       | 280.4           | 186.1              | 184.6               | 20.0                         | 164.6             | 115.8              | 94.3             | 21.5           | 58                |
| Oct.                      | 282.7           | 193.0              | 190.8               | 19.7                         | 171.1             | 111.6              | 89.7             | 21.9           | 61                |

1/ Series revised August 1990. 2/ Estimated weighted-average of BLS prices of retail cuts from Choice Yield Grade 3 carcass. 3/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale equivalent of 1.142 is used. 4/ Market value to producer for 2.4 lb of live animal, equivalent to 1 lb of retail cuts. 5/ Portion of gross farm value attributed to edible and inedible by-products. 6/ Gross farm value minus farm by-product allowance. 7/ Percent net farm value is of retail price.



Table 43--Corn Belt cattle feeding: Selected costs at current rates 1/

| Purchased During 1989-90<br>Marketing During 1990-91 | Nov.<br>May | Dec.<br>Jun. | Jan.<br>Jul. | Feb.<br>Aug. | Mar.<br>Sept. | Apr.<br>Oct. | May<br>Nov. | Jun.<br>Dec. | Jul.<br>Jan. | Aug.<br>Feb. | Sept.<br>Mar. | Oct.<br>Apr. |
|--|-------------|--------------|--------------|--------------|---------------|--------------|-------------|--------------|--------------|--------------|---------------|--------------|
| Expenses: (\$/head)                                  |             |              |              |              |               |              |             |              |              |              |               |              |
| 600 lb. feeder steer                                 | 524.28      | 517.50       | 514.20       | 509.28       | 525.00        | 544.86       | 551.40      | 564.78       | 561.00       | 553.80       | 549.00        | NA           |
| Transportation<br>to feedlot-400 miles               | 5.28        | 5.28         | 5.28         | 5.28         | 5.28          | 5.28         | 5.28        | 5.28         | 5.28         | 5.28         | 5.28          | 5.28         |
| Corn (45 bu.)  | 99.90       | 100.80       | 99.90        | 101.03       | 105.75        | 113.85       | 118.58      | 121.05       | 117.90       | 111.60       | 102.83        | 94.50        |
| Silage (1.7 tons)                                    | 39.91       | 40.64        | 40.89        | 40.68        | 41.57         | 42.40        | 43.01       | 42.92        | 41.62        | 39.45        | 38.36         | 36.78        |
| Protein supplement<br>(270 lb.)                      | 38.48       | 38.48        | 37.67        | 37.67        | 37.67         | 35.10        | 35.10       | 35.10        | 35.91        | 36.72        | 36.72         | 36.99        |
| Hay (400 lb.)  | 15.00       | 15.40        | 15.70        | 15.40        | 15.40         | 14.90        | 14.70       | 14.30        | 13.80        | 13.10        | 13.50         | 13.50        |
| Total feed costs                                     | 193.28      | 195.31       | 194.15       | 194.77       | 200.39        | 206.25       | 211.39      | 213.37       | 209.23       | 200.87       | 191.40        | 181.77       |
| Labor (4 hrs.)                                       | 15.72       | 15.72        | 15.72        | 15.72        | 15.72         | 15.72        | 15.72       | 15.72        | 15.72        | 15.72        | 15.72         | 15.72        |
| Management (1 hr.) 2/                                | 7.86        | 7.86         | 7.86         | 7.86         | 7.86          | 7.86         | 7.86        | 7.86         | 7.86         | 7.86         | 7.86          | 7.86         |
| Vet medicine 3/                                      | 5.75        | 5.75         | 5.86         | 5.86         | 5.86          | 5.92         | 5.92        | 5.92         | 5.95         | 5.95         | 5.95          | 6.07         |
| Interest on purchase<br>(6 months)                   | 31.85       | 31.44        | 30.90        | 30.61        | 31.55         | 32.36        | 32.75       | 33.55        | 33.32        | 32.90        | 32.61         | NA           |
| Power, equip., fuel,<br>shelter, deprec. 3/          | 26.83       | 26.83        | 27.31        | 27.31        | 27.31         | 27.62        | 27.62       | 27.62        | 27.73        | 27.73        | 27.73         | 28.30        |
| Death loss<br>(1% of purchase)                       | 5.24        | 5.18         | 5.14         | 5.09         | 5.25          | 5.45         | 5.51        | 5.65         | 5.61         | 5.54         | 5.49          | NA           |
| Transportation<br>(100 miles)                        | 2.31        | 2.31         | 2.31         | 2.31         | 2.31          | 2.31         | 2.31        | 2.31         | 2.31         | 2.31         | 2.31          | 2.31         |
| Marketing expenses                                   | 3.35        | 3.35         | 3.35         | 3.35         | 3.35          | 3.35         | 3.35        | 3.35         | 3.35         | 3.35         | 3.35          | 3.35         |
| Miscellaneous and<br>indirect costs 3/               | 11.60       | 11.60        | 11.81        | 11.81        | 11.81         | 11.94        | 11.94       | 11.94        | 11.99        | 11.99        | 11.99         | 12.24        |
| Total  | 833.36      | 828.13       | 823.90       | 819.25       | 841.69        | 868.93       | 881.06      | 897.35       | 889.35       | 873.29       | 858.69        | 262.90       |
| Selling price required<br>to cover: (\$/cwt.)        |             |              |              |              |               |              |             |              |              |              |               |              |
| Feed and feeder cost<br>(1050 lb.)                   | 68.34       | 67.89        | 67.46        | 67.05        | 69.08         | 71.53        | 72.65       | 74.11        | 73.36        | 71.87        | 70.51         | NA           |
| All costs (1050 lb.)                                 | 79.37       | 78.87        | 78.47        | 78.02        | 80.16         | 82.76        | 83.91       | 85.46        | 84.70        | 83.17        | 81.78         | NA           |
| Feed cost per 100 lb.<br>gain (450 lb.)              | 42.95       | 43.40        | 43.15        | 43.28        | 44.53         | 45.83        | 46.98       | 47.42        | 46.50        | 44.64        | 42.53         | 40.39        |
| Choice steers, Omaha<br>(1000-1100 lb.)              | 77.57       | 75.63        | 74.46        | 76.22        | 75.75         | 77.50        |             |              |              |              |               |              |
| Net margin   | -1.80       | -3.24        | -4.01        | -1.80        | -4.41         | -5.26        |             |              |              |              |               |              |
| Prices:  |             |              |              |              |               |              |             |              |              |              |               |              |
| Feeder steer, Choice<br>(600-700 lb.)                |             |              |              |              |               |              |             |              |              |              |               |              |
| Kansas City \$/cwt.                                  | 87.38       | 86.25        | 85.70        | 84.88        | 87.50         | 90.81        | 91.90       | 94.13        | 93.50        | 92.30        | 91.50         | NA           |
| Corn \$/bu. 4/                                       | 2.22        | 2.24         | 2.22         | 2.25         | 2.35          | 2.53         | 2.64        | 2.69         | 2.62         | 2.48         | 2.29          | 2.10         |
| Hay \$/ton 4/  | 75.00       | 77.00        | 78.50        | 77.00        | 77.00         | 74.50        | 73.50       | 71.50        | 69.00        | 65.50        | 67.50         | 67.50        |
| Corn silage \$/ton 5/                                | 23.48       | 23.91        | 24.05        | 23.93        | 24.46         | 24.94        | 25.30       | 25.25        | 24.49        | 23.21        | 22.56         | 21.64        |
| Protein supplement<br>(32-36%) \$/cwt. 6/            | 14.25       | 14.25        | 13.95        | 13.95        | 13.95         | 13.00        | 13.00       | 13.00        | 13.30        | 13.60        | 13.60         | 13.70        |
| Farm labor \$/hour                                   | 3.93        | 3.93         | 3.93         | 3.93         | 3.93          | 3.93         | 3.93        | 3.93         | 3.93         | 3.93         | 3.93          | 3.93         |
| Interest rate, annual                                | 12.15       | 12.15        | 12.02        | 12.02        | 12.02         | 11.88        | 11.88       | 11.88        | 11.88        | 11.88        | 11.88         | 11.87        |
| Transportation rate<br>\$/cwt. per 100 mile 7/       | 0.22        | 0.22         | 0.22         | 0.22         | 0.22          | 0.22         | 0.22        | 0.22         | 0.22         | 0.22         | 0.22          | 0.22         |
| Marketing expenses<br>\$/cwt. 8/                     | 3.35        | 3.35         | 3.35         | 3.35         | 3.35          | 3.35         | 3.35        | 3.35         | 3.35         | 3.35         | 3.35          | 3.35         |
| Index of prices paid by<br>farmers (1910-14=100)     | 1224        | 1224         | 1246         | 1246         | 1246          | 1260         | 1260        | 1260         | 1265         | 1265         | 1265          | 1291         |

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individuals for management, production, and locality of operation. 2/ Assumes 1 hour at twice the labor rate. 3/ Adjusted quarterly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 4/ Average price received by farmers in IA and IL. 5/ Price derived from an equivalent price of 5 bushels corn and 330 lb. hay. 6/ Average price paid by farmers in IA and IL. 7/ Converted from cents/mile for a 44,000-lb. haul. 8/ Yardage plus commission fees at a Midwest terminal market.



Table 44--Great Plains custom cattle feeding: Selected costs at current rates 1/

| Purchased During 1989-90<br>Marketed During 1990-91 | Nov.<br>May | Dec.<br>June | Jan.<br>July | Feb.<br>Aug. | Mar.<br>Sept. | Apr.<br>Oct. | May<br>Nov. | June<br>Dec. | July<br>Jan. | Aug.<br>Feb. | Sept.<br>Mar. | Oct.<br>Apr. |
|---|-------------|--------------|--------------|--------------|---------------|--------------|-------------|--------------|--------------|--------------|---------------|--------------|
| Expenses: (\$/head)                                 |             |              |              |              |               |              |             |              |              |              |               |              |
| 600 lb. feeder steer                                | 496.80      | 511.02       | 500.70       | 504.78       | 516.78        | 515.28       | 523.80      | 525.78       | 536.64       | 564.60       | 545.28        | 540.00       |
| Transportation to<br>feedlot (300 miles)            | 3.96        | 3.96         | 3.96         | 3.96         | 3.96          | 3.96         | 3.96        | 3.96         | 3.96         | 3.96         | 3.96          | 3.96         |
| Commission  | 3.00        | 3.00         | 3.00         | 3.00         | 3.00          | 3.00         | 3.00        | 3.00         | 3.00         | 3.00         | 3.00          | 3.00         |
| Feed  |             |              |              |              |               |              |             |              |              |              |               |              |
| Milo (1500 lb) 2/                                   | 63.15       | 62.85        | 62.55        | 62.70        | 64.20         | 67.80        | 72.15       | 72.45        | 74.85        | 69.45        | 67.05         | 64.95        |
| Corn (1500 lb) 2/                                   | 72.45       | 72.45        | 72.75        | 73.50        | 76.35         | 81.45        | 85.50       | 85.65        | 82.35        | 78.00        | 70.95         | 69.75        |
| Cotton seed meal<br>(400 lb)                        | 53.60       | 53.60        | 54.40        | 54.40        | 54.40         | 63.60        | 63.60       | 63.60        | 52.40        | 52.40        | 52.40         | 53.60        |
| Alfalfa hay (800 lb) 3/                             | 52.80       | 47.60        | 53.20        | 52.00        | 56.00         | 48.40        | 56.80       | 51.20        | 58.00        | 59.20        | 50.00         | 53.60        |
| Total feed cost                                     | 242.00      | 236.50       | 242.90       | 242.60       | 250.95        | 261.25       | 278.05      | 272.90       | 267.60       | 259.05       | 240.40        | 241.90       |
| Feed handling and<br>management charge              | 21.00       | 21.00        | 21.00        | 21.00        | 21.00         | 21.00        | 21.00       | 21.00        | 21.00        | 21.00        | 21.00         | 21.00        |
| Vet medicine  | 3.00        | 3.00         | 3.00         | 3.00         | 3.00          | 3.00         | 3.00        | 3.00         | 3.00         | 3.00         | 3.00          | 3.00         |
| Interest on feeder<br>and 1/2 feed                  | 37.69       | 38.39        | 37.64        | 37.88        | 38.86         | 38.75        | 39.77       | 39.73        | 40.23        | 41.65        | 39.93         | 39.66        |
| Death loss<br>(1.5% of purchase)                    | 7.45        | 7.67         | 7.51         | 7.57         | 7.75          | 7.73         | 7.86        | 7.89         | 8.05         | 8.47         | 8.18          | 8.10         |
| Marketing 4/  | f.o.b.      | f.o.b.       | f.o.b.       | f.o.b.       | f.o.b.        | f.o.b.       | f.o.b.      | f.o.b.       | f.o.b.       | f.o.b.       | f.o.b.        | f.o.b.       |
| Total   | 814.90      | 824.53       | 819.71       | 823.79       | 845.30        | 853.97       | 880.44      | 877.26       | 883.48       | 904.73       | 864.75        | 860.62       |
| Selling price required<br>to cover: 5/ \$/cwt.      |             |              |              |              |               |              |             |              |              |              |               |              |
| Feed and feeder cost<br>(1056 lb)                   | 69.96       | 70.79        | 70.42        | 70.77        | 72.70         | 73.54        | 75.93       | 75.63        | 76.16        | 78.00        | 74.40         | 74.04        |
| All costs   | 77.17       | 78.08        | 77.62        | 78.01        | 80.05         | 80.87        | 83.37       | 83.07        | 83.66        | 85.67        | 81.89         | 81.50        |
| Selling price 6/                                    | 78.14       | 76.73        | 75.07        | 77.61        | 78.05         | 79.82        |             |              |              |              |               |              |
| Net margin  | 0.97        | -1.35        | -2.55        | -0.40        | -2.00         | -1.05        |             |              |              |              |               |              |
| Cost per 100 lb. gain:                              |             |              |              |              |               |              |             |              |              |              |               |              |
| Variable cost                                       |             |              |              |              |               |              |             |              |              |              |               |              |
| less interest \$/cwt.                               | 54.69       | 53.63        | 54.88        | 54.83        | 56.54         | 58.60        | 61.98       | 60.96        | 59.93        | 58.30        | 54.52         | 54.80        |
| Feed costs \$/cwt.                                  | 48.40       | 47.30        | 48.58        | 48.52        | 50.19         | 52.25        | 55.61       | 54.58        | 53.52        | 51.81        | 48.08         | 48.38        |
| Prices: (\$/cwt)                                    |             |              |              |              |               |              |             |              |              |              |               |              |
| Choice feeder steer<br>600-700 lb. Amarillo         | 82.80       | 85.17        | 83.45        | 84.13        | 86.13         | 85.88        | 87.30       | 87.63        | 89.44        | 94.10        | 90.88         | 90.00        |
| Transportation rate<br>\$/cwt/100 miles 7/          | 0.22        | 0.22         | 0.22         | 0.22         | 0.22          | 0.22         | 0.22        | 0.22         | 0.22         | 0.22         | 0.22          | 0.22         |
| Commission fee \$/cwt.                              | 0.50        | 0.50         | 0.50         | 0.50         | 0.50          | 0.50         | 0.50        | 0.50         | 0.50         | 0.50         | 0.50          | 0.50         |
| Feed, Prices, Texas                                 |             |              |              |              |               |              |             |              |              |              |               |              |
| Milo \$/cwt   | 4.06        | 4.04         | 4.02         | 4.03         | 4.13          | 4.37         | 4.66        | 4.68         | 4.84         | 4.48         | 4.32          | 4.18         |
| Corn \$/cwt.  | 4.68        | 4.68         | 4.70         | 4.75         | 4.94          | 5.28         | 5.55        | 5.56         | 5.34         | 5.05         | 4.58          | 4.50         |
| Cottonseed Meal<br>(41%) \$/cwt. 8/                 | 13.40       | 13.40        | 13.60        | 13.60        | 13.60         | 15.90        | 15.90       | 15.90        | 13.10        | 13.10        | 13.10         | 13.40        |
| Alfalfa hay \$/ton                                  | 102.00      | 89.00        | 103.00       | 100.00       | 110.00        | 91.00        | 112.00      | 98.00        | 115.00       | 118.00       | 95.00         | 104.00       |
| Feed handling and<br>management \$/ton              | 10.00       | 10.00        | 10.00        | 10.00        | 10.00         | 10.00        | 10.00       | 10.00        | 10.00        | 10.00        | 10.00         | 10.00        |
| Interest, annual<br>rate 9/                         | 12.20       | 12.20        | 12.10        | 12.10        | 12.10         | 12.00        | 12.00       | 12.00        | 12.00        | 12.00        | 12.00         | 12.00        |

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production, and locality of operation. Steers are assumed to gain 500 lb in 180 days at 2.8 lb per day with feed conversion of 8.4 lb per pound gain. 2/ Texas Panhandle elevator price plus \$.15/cwt handling and transportation to feedlots. 3/ Average price received by farmers plus \$30/ton handling and transportation to feedlots. 4/ Most cattle sold f.o.b. at the feedlot with 4-percent shrink. 5/ Sale weight 1,056 lb (1,100 lb less 4-percent shrink). 6/ Choice slaughter steers, 900-1100 lb, Texas-New Mexico direct. 7/ Converted from cents per mile for a 44,000-lb haul. 8/ Average prices paid by farmers. 9/ Prime rate plus 2 points.



to import 394,000 metric tons of beef in Japan's fiscal year, April 1, 1990 through March 31, 1991 (JFY90), the last year of the three-year agreement. This is up 60,000 tons from the year before. Japan actually imported more than the total agreed upon during JFY89. However, the beef did not move onto the market as quickly as hoped and stocks expanded straining storage capacity. Because of Japan's multi-layered distribution system, price declines have not been passed on at the retail level and many feel that, until this happens, imported beef consumption will not increase in Japan. If part of beef's allure was its scarcity and expense, just passing on lower prices to consumers at the retail level will not move beef across the counter in increasing quantities. In fact, the lower prices could cause beef purchases to fall.

It is difficult to gauge just how much U.S. beef exports to Japan have changed from last year because beef exports in 1989 are probably overstated. The U.S. Census Bureau is currently reviewing the suspect data. At present, U.S. exports to Japan show a 42 percent increase in 1989 over 1988, while corresponding Japanese imports of quota meat show only a 23 percent increase.

Partially adjusted U.S. census data indicate exports to Japan from January-August 1990 are down 19 percent from a year earlier. Japanese statistics show U.S. imports to be slightly higher in 1990 over last year. In either case, for Japan to reach the 394,000 metric tons quota level, large imports will have to be made at the end of 1990 and beginning of 1991. Lack of storage space may make importing the large quantities difficult.

#### **U.S. Exports to South Korea and Canada Increase**

Exports to South Korea may increase in the latter part of the year as the Korean government has announced intent to expand imports. Especially more high valued products from the United States.

U.S. exports to Canada show a substantial increase over last year. With the shift of beef production in Canada to the Western Provinces the United States is able to ship more into

Canada's eastern provinces. Demand for high-quality portion control/boxed beef for the foodservice industry fuels this increase. However, a portion of the increase is due to changes in reporting. Beginning in January 1990 Canada agreed to accept U.S. import statistics for their export statistics and the United States agreed to do the same. Therefore, Canadian import statistics are now being shown as U.S. export statistics. The problem of discrepancies between the

Table 46--Imports of feeder cattle and calves and hogs from Canada and Mexico

| Year  | Feeder cattle and calves |         | Hogs      |
|-------|--------------------------|---------|-----------|
|       | Canada                   | Mexico  | Canada    |
|       | Number                   |         |           |
| 1988  |                          |         |           |
| Jan.  | 28,013                   | 304,053 | 58,942    |
| Feb.  | 29,193                   | 233,635 | 43,759    |
| Mar.  | 34,848                   | 95,394  | 53,682    |
| Apr.  | 30,899                   | 58,169  | 55,393    |
| May   | 44,319                   | 32,816  | 51,366    |
| June  | 41,631                   | 5,043   | 62,137    |
| July  | 25,098                   | 0       | 53,360    |
| Aug.  | 48,177                   | 8       | 83,256    |
| Sept. | 56,200                   | 0       | 104,310   |
| Oct.  | 53,307                   | 178     | 108,945   |
| Nov.  | 56,006                   | 4,184   | 106,901   |
| Dec.  | 29,016                   | 107,805 | 53,074    |
| Total | 476,707                  | 841,285 | 835,125   |
| 1989  |                          |         |           |
| Jan.  | 52,285                   | 105,822 | 162,762   |
| Feb.  | 34,515                   | 146,996 | 103,245   |
| Mar.  | 39,386                   | 132,921 | 144,106   |
| Apr.  | 46,410                   | 108,428 | 65,383    |
| May   | 61,756                   | 9,401   | 74,488    |
| June  | 58,534                   | 233     | 70,821    |
| July  | 19,379                   | 3,429   | 35,796    |
| Aug.  | 51,205                   | 4,172   | 111,765   |
| Sept. | 50,484                   | 716     | 74,946    |
| Oct.  | 65,841                   | 509     | 79,625    |
| Nov.  | 54,132                   | 132,404 | 61,972    |
| Dec.  | 40,861                   | 228,357 | 88,255    |
| Total | 573,408                  | 873,388 | 1,073,164 |
| 1990  |                          |         |           |
| Jan.  | 53,709                   | 126,109 | 119,009   |
| Feb.  | 68,728                   | 117,738 | 91,116    |
| Mar.  | 74,048                   | 122,648 | 68,791    |
| Apr.  | 87,155                   | 125,692 | 90,417    |
| May   | 90,785                   | 117,799 | 83,125    |
| June  | 79,724                   | 71,359  | 61,262    |
| July  | 46,664                   | 46,070  | 61,829    |
| Aug.  | 57,177                   | 18,022  | 54,927    |

Table 47--U.S. beef and veal trade, carcass weight 1/

| Country or area | Annual 1989 | January - August |        | Percent change |
|-----------------|-------------|------------------|--------|----------------|
|                 |             | 1989             | 1990   |                |
|                 |             | Million pounds   |        | Percent        |
| Imports         |             |                  |        |                |
| Australia       | 818.4       | 480.4            | 683.3  | 42.2           |
| New Zealand     | 658.4       | 571.3            | 443.1  | -22.4          |
| Canada          | 239.3       | 145.4            | 139.5  | -4.0           |
| Brazil          | 78.2        | 52.1             | 43.8   | -16.0          |
| Argentina       | 189.3       | 116.2            | 138.0  | 18.8           |
| Central America | 173.3       | 98.7             | 111.1  | 12.5           |
| Other           | 18.5        | 16.0             | 17.4   | 8.7            |
| Total           | 2175.4      | 1480.1           | 1576.2 | 6.5            |
| Exports         |             |                  |        |                |
| Japan           | 715.5       | 475.7            | 384.2  | -19.2          |
| Canada          | 98.2        | 64.0             | 123.8  | 93.3           |
| Caribbean       | 22.6        | 14.0             | 16.6   | 18.9           |
| Korea, S.       | 57.7        | 39.6             | 57.2   | 44.4           |
| Other           | 128.5       | 88.5             | 73.1   | -17.4          |
| Total           | 1022.6      | 681.8            | 654.9  | -3.9           |

Table 45--U.S. live cattle trade 1/

| Country or area | Annual 1989 | January - August |        | Percent change |
|-----------------|-------------|------------------|--------|----------------|
|                 |             | 1989             | 1990   |                |
|                 |             | Thousand head    |        | Percent        |
| Imports         |             |                  |        |                |
| Mexico          | 873.6       | 511.6            | 745.5  | 45.7           |
| Canada          | 584.7       | 369.9            | 571.7  | 54.5           |
| Other           | 1.1         | 1.1              | 0.0    | -99.6          |
| Total           | 1459.4      | 882.6            | 1317.2 | 49.2           |
| Exports         |             |                  |        |                |
| Mexico          | 124.9       | 103.3            | 43.5   | -57.8          |
| Canada          | 23.7        | 8.4              | 17.1   | 104.1          |
| Other           | 20.6        | 14.9             | 17.8   | 20.0           |
| Total           | 169.1       | 126.5            | 78.5   | -38.0          |

1/ May not add due to rounding. Percent change calculated from unrounded data.

1/ Data may not add due to rounding. Percent change calculated from unrounded data.



import and export statistics has been studied for some time. Importing countries are generally recognized as being more careful in recording what arrives because of import tariffs and veterinary and sanitary regulations, etc. As a result, exports to Canada prior to 1990 appear to have been underreported.

### Record Live Cattle Imports in 1990

Total U.S. cattle imports are forecast at 1.8 million head or larger in 1990. While Mexico remains the major supplier of live cattle to the United States, record numbers are being imported from Canada.

The Mexican government has been fostering a more conducive atmosphere for exports because of the need for hard currency to service Mexico's external debt. The export tariff on live cattle was reduced in September 1990 from 10 percent (minimum \$30 per head) to 5 percent, and will be reduced again in September 1991 to 1.67 percent. In addition, export permits are no longer required so that cattle marketings can be more evenly spaced throughout the year. Before the autumn of 1988, Mexico restricted exports to steers from northern Mexican states. Steers from other parts of Mexico are now allowed to be exported.

Beef output surged upward and inventories dropped in Mexico last year because of drought. While inventories continue to decline in Mexico, rain has improved pastures in Northern Mexico that were damaged by early winter freezing last year and another summer of drought. Ranchers are planning to increase herds to take advantage of the U.S. market.

U.S. imports of cattle from Mexico, as reported by the USDA Animal and Plant Health Inspection Service, reached 821,599 head for the period January 1-October 20, 1990. Preliminary Canadian trade data show January-October exports of slaughter cattle at 405,133 head, up 21 percent from a year earlier. Canadian feeder cattle exports are 153,518 head, compared with 37,822 last year.

Higher cattle prices in the United States, compared with similar markets in Canada, continue to draw in Canadian cattle. Inventories in Canada are forecast to increase 2 percent in 1991. With the forecasts indicating a continuing differential in prices, exports from Western Canada are likely to continue to rise.

With prospects for exports improved in Mexico and increasing inventories in Canada, U.S. imports of cattle are forecast to remain large in 1991.

U.S. cattle exports declined in 1990, and are likely to reach only 120,000 head as U.S. prices remain at record levels and cattle numbers at cyclical lows. If credit programs with Mexico for cattle are announced for next year, U.S. exports will increase in 1991 over this year.

### Sheep and Lambs

Since the beginning of July, slaughter lamb prices at San Angelo, Texas, have held in the mid-to-lower \$50 per cwt range. Continued increases in production above a year ago have kept prices low. Third-quarter production was 5 percent above 1989 levels at 85 million pounds. Production for the fourth quarter is expected to be about 95 million pounds, up about 3 percent from a year earlier.

Lamb and yearling slaughter is up about 5 percent for the year, but mature sheep slaughter is down about the same percent. This indicates that the low lamb prices have not resulted in any large level of culling in the breeding stock. Lamb and yearling slaughter is up about the same percentage as the 1990 breeding flock, indicating that retention of ewe lambs for the breeding flock is about normal. Both of these factors indicate that the breeding flock on January 1, 1991, should be about unchanged from a year ago.

Production for 1991 is expected to be even with this year at 363 million pounds. Prices for slaughter lambs at San Angelo, Texas, was expected to average in the \$53 to \$59 per cwt range. Production for the first quarter should be about 95 million pounds as the spring religious holidays occur in the first quarter of 1991. Prices for the first quarter should average \$53 to \$59.

Table 48--Commercial sheep and lamb slaughter 1/ and production

| Year | Lambs                | Sheep | Total | Dressed weight | Production |
|------|----------------------|-------|-------|----------------|------------|
|      | -----1,000 head----- |       |       | Lb             | Mil lb     |
| 1986 |                      |       |       |                |            |
| I    | 1,438                | 72    | 1,510 | 60             | 90         |
| II   | 1,246                | 97    | 1,343 | 58             | 78         |
| III  | 1,324                | 80    | 1,404 | 58             | 81         |
| IV   | 1,306                | 72    | 1,378 | 60             | 82         |
| Year | 5,314                | 321   | 5,635 | 59             | 331        |
| 1987 |                      |       |       |                |            |
| I    | 1,213                | 57    | 1,270 | 60             | 76         |
| II   | 1,211                | 79    | 1,290 | 58             | 75         |
| III  | 1,241                | 75    | 1,316 | 59             | 77         |
| IV   | 1,253                | 70    | 1,323 | 61             | 81         |
| Year | 4,918                | 281   | 5,199 | 59             | 309        |
| 1988 |                      |       |       |                |            |
| I    | 1,292                | 62    | 1,354 | 63             | 85         |
| II   | 1,178                | 82    | 1,260 | 63             | 80         |
| III  | 1,255                | 80    | 1,335 | 60             | 80         |
| IV   | 1,265                | 79    | 1,344 | 63             | 84         |
| Year | 4,990                | 303   | 5,293 | 62             | 329        |
| 1989 |                      |       |       |                |            |
| I    | 1,306                | 66    | 1,372 | 64             | 88         |
| II   | 1,198                | 96    | 1,294 | 62             | 80         |
| III  | 1,264                | 101   | 1,365 | 59             | 81         |
| IV   | 1,351                | 83    | 1,434 | 64             | 92         |
| Year | 5,119                | 346   | 5,465 | 62             | 341        |
| 1989 |                      |       |       |                |            |
| I    | 1,356                | 67    | 1,423 | 65             | 93         |
| II   | 1,313                | 93    | 1,406 | 64             | 90         |
| III  | 1,279                | 90    | 1,369 | 62             | 85         |

1/ Classes estimated.



Table 49--Average Bureau of Labor Statistics (BLS) retail price per pound of specified meat cuts

| Year and item                 | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|-------------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Dollars                       |      |      |      |      |      |      |      |      |       |      |      |      |
| <b>Choice Beef:</b>           |      |      |      |      |      |      |      |      |       |      |      |      |
| Ground chuck                  |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.74 | 1.74 | 1.75 | 1.75 | 1.74 | 1.77 | 1.75 | 1.75 | 1.77  | 1.78 | 1.81 | 1.79 |
| 1989                          | 1.81 | 1.80 | 1.85 | 1.82 | 1.82 | 1.80 | 1.81 | 1.82 | 1.82  | 1.84 | 1.87 | 1.88 |
| 1990                          | 1.91 | 1.95 | 1.94 | 1.97 | 1.97 | 1.97 | 1.95 | 1.97 | 1.99  | 1.97 |      |      |
| Ground beef                   |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.31 | 1.32 | 1.34 | 1.34 | 1.36 | 1.39 | 1.37 | 1.37 | 1.37  | 1.39 | 1.41 | 1.40 |
| 1989                          | 1.40 | 1.37 | 1.43 | 1.42 | 1.44 | 1.44 | 1.44 | 1.45 | 1.46  | 1.45 | 1.49 | 1.50 |
| 1990                          | 1.56 | 1.57 | 1.57 | 1.59 | 1.58 | 1.59 | 1.58 | 1.58 | 1.59  | 1.58 |      |      |
| Chuck roast, bone in          |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.64 | 1.74 | 1.69 | 1.72 | 1.80 | 1.78 | 1.70 | 1.67 | 1.74  | 1.74 | 1.75 | 1.80 |
| 1989                          | 1.81 | 1.91 | 1.87 | 1.89 | 1.90 | 1.86 | 1.86 | 1.78 | 1.88  | 1.89 | 1.92 | 2.00 |
| 1990                          | 2.03 | 2.12 | 2.05 | 2.10 | 2.12 | 2.07 | 2.07 | 2.04 | 2.07  | 2.09 |      |      |
| Round roast, boneless         |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.56 | 2.61 | 2.67 | 2.60 | 2.61 | 2.66 | 2.63 | 2.64 | 2.64  | 2.60 | 2.68 | 2.68 |
| 1989                          | 2.75 | 2.75 | 2.76 | 2.77 | 2.78 | 2.73 | 2.73 | 2.71 | 2.78  | 2.78 | 2.77 | 2.78 |
| 1990                          | 2.91 | 2.89 | 2.93 | 2.92 | 2.95 | 2.92 | 2.93 | 2.92 | 2.89  | 2.97 |      |      |
| Rib roast, bone in            |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 3.57 | 3.59 | 3.66 | 3.75 | 3.72 | 3.93 | 4.02 | 4.04 | 4.12  | 4.12 | 4.10 | 4.03 |
| 1989                          | 4.11 | 4.04 | 4.06 | 4.16 | 4.24 | 4.06 | 4.34 | 4.29 | 4.19  | 4.17 | 4.19 | 4.21 |
| 1990                          | 4.29 | 4.29 | 4.37 | 4.33 | 4.44 | 4.54 | 4.62 | 4.57 | 4.65  | 4.66 |      |      |
| Round steak, boneless         |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.88 | 2.94 | 2.94 | 3.01 | 3.00 | 3.05 | 2.99 | 2.99 | 3.04  | 2.98 | 3.00 | 3.01 |
| 1989                          | 3.07 | 3.09 | 3.12 | 3.14 | 3.10 | 3.06 | 3.11 | 3.12 | 3.10  | 3.12 | 3.18 | 3.17 |
| 1990                          | 3.30 | 3.31 | 3.27 | 3.29 | 3.32 | 3.35 | 3.29 | 3.32 | 3.28  | 3.33 |      |      |
| Sirloin steak, bone in        |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.99 | 3.04 | 3.13 | 3.18 | 3.35 | 3.49 | 3.54 | 3.39 | 3.45  | 3.31 | 3.36 | 3.23 |
| 1989                          | 3.39 | 3.40 | 3.61 | 3.57 | 3.70 | 3.67 | 3.70 | 3.66 | 3.62  | 3.55 | 3.57 | 3.46 |
| 1990                          | 3.58 | 3.55 | 3.52 | 3.80 | 3.61 | 3.79 | 3.73 | 3.73 | 3.68  | 3.72 |      |      |
| Chuck steak, bone in 1/       |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.61 | 1.62 | 1.64 | 1.65 | 1.67 | 1.71 | 1.70 | 1.69 | 1.70  | 1.70 | 1.72 | 1.71 |
| 1989                          | 1.74 | 1.74 | 1.78 | 1.78 | 1.79 | 1.78 | 1.79 | 1.79 | 1.80  | 1.80 | 1.81 | 1.83 |
| 1990                          | 1.86 | 1.89 | 1.89 | 1.91 | 1.92 | 1.93 | 1.93 | 1.92 | 1.94  | 1.94 |      |      |
| T-Bone steak, bone in         |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 4.31 | 4.27 | 4.33 | 4.43 | 4.54 | 4.90 | 5.18 | 5.20 | 4.86  | 4.84 | 4.83 | 4.97 |
| 1989                          | 4.95 | 4.91 | 5.05 | 5.04 | 5.14 | 5.16 | 5.22 | 5.10 | 5.15  | 5.08 | 4.99 | 5.04 |
| 1990                          | 5.11 | 4.56 | 4.71 | 4.78 | 4.96 | 5.01 | 4.99 | 4.91 | 5.01  | 4.96 |      |      |
| Porterhouse steak, bone in 1/ |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 4.40 | 4.43 | 4.49 | 4.51 | 4.56 | 4.66 | 4.63 | 4.60 | 4.64  | 4.64 | 4.68 | 4.68 |
| 1989                          | 4.74 | 4.76 | 4.86 | 4.86 | 4.89 | 4.87 | 4.88 | 4.89 | 4.90  | 4.90 | 4.96 | 4.99 |
| 1990                          | 5.09 | 5.16 | 5.17 | 5.23 | 5.25 | 5.27 | 5.28 | 5.25 | 5.29  | 5.31 |      |      |
| <b>Pork:</b>                  |      |      |      |      |      |      |      |      |       |      |      |      |
| Bacon, sliced                 |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.95 | 1.94 | 1.92 | 1.91 | 1.90 | 1.90 | 1.91 | 1.88 | 1.84  | 1.86 | 1.80 | 1.79 |
| 1989                          | 1.80 | 1.80 | 1.79 | 1.75 | 1.68 | 1.69 | 1.71 | 1.72 | 1.72  | 1.77 | 1.82 | 1.96 |
| 1990                          | 1.97 | 2.01 | 1.99 | 1.98 | 2.04 | 2.15 | 2.21 | 2.24 | 2.18  | 2.21 |      |      |
| Chops, center cut             |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.66 | 2.72 | 2.68 | 2.71 | 2.78 | 2.93 | 2.90 | 2.87 | 2.90  | 2.77 | 2.67 | 2.65 |
| 1989                          | 2.78 | 2.75 | 2.80 | 2.80 | 2.76 | 2.82 | 2.91 | 2.92 | 2.95  | 2.89 | 2.97 | 2.85 |
| 1990                          | 3.02 | 2.96 | 3.01 | 3.16 | 3.20 | 3.44 | 3.47 | 3.51 | 3.36  | 3.37 |      |      |
| Ham, rump or shank half 1/    |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.63 | 1.57 | 1.60 | 1.58 | 1.58 | 1.62 | 1.62 | 1.62 | 1.61  | 1.59 | 1.56 | 1.55 |
| 1989                          | 1.58 | 1.57 | 1.57 | 1.58 | 1.56 | 1.58 | 1.61 | 1.63 | 1.62  | 1.63 | 1.66 | 1.66 |
| 1990                          | 1.70 | 1.70 | 1.82 | 1.72 | 1.78 | 1.89 | 1.91 | 1.94 | 1.92  | 1.93 |      |      |
| Sirloin roast, bone in 1/     |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.92 | 1.90 | 1.90 | 1.88 | 1.89 | 1.94 | 1.93 | 1.93 | 1.92  | 1.89 | 1.86 | 1.85 |
| 1989                          | 1.89 | 1.88 | 1.88 | 1.88 | 1.86 | 1.89 | 1.92 | 1.94 | 1.93  | 1.94 | 1.97 | 1.98 |
| 1990                          | 2.02 | 2.02 | 2.04 | 2.06 | 2.12 | 2.25 | 2.28 | 2.31 | 2.29  | 2.31 |      |      |
| Shoulder picnic, bone in      |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 1.14 | 1.13 | 1.14 | 1.12 | 1.09 | 1.15 | 1.13 | 1.11 | 1.11  | 1.10 | 1.12 | 1.10 |
| 1989                          | 1.12 | 1.06 | 1.06 | 1.08 | 1.07 | 1.08 | 1.09 | 1.10 | 1.10  | 1.10 | 1.12 | 1.17 |
| 1990                          | 1.14 | 1.18 | 1.18 | 1.21 | 1.24 | 1.28 | 1.30 | 1.32 | 1.35  | 1.39 |      |      |
| Sausage, fresh, loose         |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.05 | 1.97 | 1.99 | 2.02 | 2.02 | 1.95 | 1.99 | 1.94 | 1.95  | 1.90 | 1.89 | 1.92 |
| 1989                          | 1.92 | 1.94 | 1.92 | 1.93 | 1.94 | 1.93 | 1.99 | 2.04 | 2.02  | 2.10 | 2.11 | 2.12 |
| 1990                          | 2.12 | 2.20 | 2.16 | 2.21 | 2.29 | 2.41 | 2.49 | 2.50 | 2.49  | 2.52 |      |      |
| <b>Miscellaneous cuts:</b>    |      |      |      |      |      |      |      |      |       |      |      |      |
| Ham, canned, 3 or 5 lb        |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.77 | 2.75 | 2.71 | 2.73 | 2.74 | 2.73 | 2.77 | 2.73 | 2.74  | 2.74 | 2.69 | 2.60 |
| 1989                          | 2.75 | 2.71 | 2.63 | 2.70 | 2.64 | 2.68 | 2.66 | 2.65 | 2.70  | 2.68 | 2.61 | 2.62 |
| 1990                          | 2.72 | 2.77 | 2.75 | 2.68 | 2.77 | 2.85 | 2.84 |      |       |      |      |      |
| Frankfurters, all meat        |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.02 | 2.05 | 2.05 | 2.01 | 2.02 | 2.02 | 2.01 | 2.02 | 2.00  | 2.02 | 2.03 | 2.04 |
| 1989                          | 2.08 | 2.07 | 2.07 | 2.03 | 2.05 | 2.02 | 2.01 | 2.09 | 2.09  | 2.04 | 2.10 | 2.11 |
| 1990                          | 2.16 | 2.22 | 2.23 | 2.19 | 2.18 | 2.31 | 2.31 | 2.28 | 2.37  | 2.37 |      |      |
| Bologna                       |      |      |      |      |      |      |      |      |       |      |      |      |
| 1988                          | 2.24 | 2.23 | 2.23 | 2.20 | 2.18 | 2.24 | 2.26 | 2.29 | 2.25  | 2.27 | 2.28 | 2.24 |
| 1989                          | 2.22 | 2.24 | 2.23 | 2.24 | 2.23 | 2.24 | 2.24 | 2.27 | 2.34  | 2.38 | 2.37 | 2.40 |
| 1990                          | 2.42 | 2.44 | 2.45 | 2.47 | 2.47 | 2.54 | 2.52 | 2.56 | 2.50  | 2.50 |      |      |

1/ ERS estimate from BLS index and historical data.



Table 50--Red meat supply and utilization, carcass and retail weight 1/

| Year                     | Production      |      | Begin-<br>ning<br>stocks | Im-<br>ports | Total<br>supply | Ex-<br>ports | Ending<br>stocks | Total<br>disap-<br>pearance | Per capita        |                  |
|--------------------------|-----------------|------|--------------------------|--------------|-----------------|--------------|------------------|-----------------------------|-------------------|------------------|
|                          | Commer-<br>cial | Farm |                          |              |                 |              |                  |                             | Carcass<br>weight | Retail<br>weight |
| -----Million pounds----- |                 |      |                          |              |                 |              |                  |                             | -----Pounds-----  |                  |
| Beef:                    |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| 1989                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 5,530           | 40   | 422                      | 566          | 6,558           | 212          | 398              | 5,948                       | 24.0              | 16.9             |
| II                       | 5,777           | 17   | 398                      | 533          | 6,725           | 271          | 322              | 6,132                       | 24.7              | 17.4             |
| III                      | 5,893           | 16   | 322                      | 524          | 6,755           | 284          | 307              | 6,164                       | 24.8              | 17.5             |
| IV                       | 5,774           | 40   | 307                      | 532          | 6,673           | 295          | 335              | 6,043                       | 24.2              | 17.1             |
| Year                     | 22,974          | 113  | 422                      | 2,175        | 25,684          | 1,062        | 335              | 24,287                      | 97.7              | 68.9             |
| 1990                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 5,507           | 40   | 335                      | 598          | 6,480           | 232          | 408              | 5,840                       | 23.3              | 16.4             |
| II                       | 5,733           | 17   | 408                      | 573          | 6,731           | 237          | 341              | 6,153                       | 24.5              | 17.3             |
| III                      | 5,814           | 16   | 341                      | 595          | 6,766           | 260          | 322              | 6,184                       | 24.6              | 17.4             |
| Year 2/                  | 22,704          | 113  | 335                      | 2,330        | 25,482          | 1,025        | 325              | 24,132                      | 96.2              | 67.8             |
| 1991                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                  | 23,000          | 113  | 325                      | 2,270        | 25,708          | 1,055        | 315              | 24,338                      | 96.2              | 67.8             |
| Pork:                    |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| 1989                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 3,885           | 19   | 414                      | 251          | 4,569           | 55           | 468              | 4,047                       | 16.3              | 15.5             |
| II                       | 3,929           | 8    | 468                      | 247          | 4,652           | 67           | 459              | 4,126                       | 16.6              | 15.8             |
| III                      | 3,790           | 8    | 459                      | 198          | 4,455           | 66           | 337              | 4,052                       | 16.3              | 15.4             |
| IV                       | 4,155           | 19   | 337                      | 200          | 4,711           | 80           | 285              | 4,346                       | 17.4              | 16.5             |
| Year                     | 15,759          | 54   | 414                      | 896          | 17,123          | 268          | 285              | 16,570                      | 66.6              | 63.2             |
| 1990                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 3,902           | 19   | 285                      | 212          | 4,418           | 69           | 333              | 4,016                       | 16.0              | 15.2             |
| II                       | 3,645           | 8    | 333                      | 231          | 4,217           | 59           | 339              | 3,819                       | 15.2              | 14.4             |
| III                      | 3,639           | 8    | 339                      | 245          | 4,231           | 45           | 267              | 3,919                       | 15.6              | 14.8             |
| Year 2/                  | 15,236          | 54   | 285                      | 923          | 16,498          | 228          | 350              | 15,920                      | 63.4              | 60.1             |
| 1991                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                  | 15,750          | 54   | 350                      | 965          | 17,119          | 265          | 375              | 16,479                      | 65.1              | 61.7             |
| Veal:                    |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| 1989                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 91              | 4    | 5                        | 0 3/         | 100             | 0            | 7                | 93                          | 0.4               | 0.3              |
| II                       | 85              | 1    | 7                        | 0            | 93              | 0            | 6                | 87                          | 0.4               | 0.3              |
| III                      | 84              | 2    | 6                        | 0            | 92              | 0            | 5                | 87                          | 0.3               | 0.3              |
| IV                       | 84              | 4    | 5                        | 0            | 93              | 0            | 4                | 89                          | 0.4               | 0.3              |
| Year                     | 344             | 11   | 5                        | 0            | 360             | 0            | 4                | 356                         | 1.4               | 1.2              |
| 1990                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 79              | 4    | 4                        | 0            | 87              | 0            | 4                | 83                          | 0.3               | 0.3              |
| II                       | 74              | 1    | 4                        | 0            | 79              | 0            | 5                | 74                          | 0.3               | 0.2              |
| III                      | 80              | 1    | 5                        | 0            | 86              | 0            | 6                | 80                          | 0.3               | 0.3              |
| Year 2/                  | 313             | 9    | 4                        | 0            | 326             | 0            | 5                | 321                         | 1.3               | 1.1              |
| 1991                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                  | 292             | 9    | 5                        | 0            | 306             | 0            | 4                | 302                         | 1.2               | 1.0              |
| Lamb and Mutton:         |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| 1989                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 88              | 2    | 6                        | 16           | 112             | 1            | 7                | 104                         | 0.4               | 0.4              |
| II                       | 80              | 1    | 7                        | 16           | 104             | 0            | 8                | 96                          | 0.4               | 0.3              |
| III                      | 81              | 1    | 8                        | 15           | 105             | 1            | 7                | 97                          | 0.4               | 0.3              |
| IV                       | 92              | 2    | 7                        | 16           | 117             | 0            | 8                | 109                         | 0.4               | 0.4              |
| Year                     | 341             | 6    | 6                        | 63           | 416             | 2            | 8                | 406                         | 1.6               | 1.5              |
| 1990                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 93              | 2    | 8                        | 12           | 115             | 1            | 8                | 106                         | 0.4               | 0.4              |
| II                       | 90              | 1    | 8                        | 12           | 111             | 0            | 10               | 101                         | 0.4               | 0.4              |
| III                      | 85              | 1    | 10                       | 13           | 109             | 1            | 9                | 99                          | 0.4               | 0.4              |
| Year 2/                  | 363             | 6    | 8                        | 50           | 427             | 2            | 8                | 417                         | 1.7               | 1.5              |
| 1991                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                  | 363             | 6    | 8                        | 55           | 432             | 2            | 7                | 423                         | 1.7               | 1.5              |
| Total red meat:          |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| 1989                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 9,594           | 65   | 847                      | 833          | 11,339          | 268          | 880              | 10,192                      | 41.1              | 33.1             |
| II                       | 9,871           | 27   | 880                      | 796          | 11,574          | 338          | 795              | 10,441                      | 42.0              | 33.8             |
| III                      | 9,848           | 27   | 795                      | 737          | 11,407          | 351          | 656              | 10,400                      | 41.8              | 33.5             |
| IV                       | 10,105          | 65   | 656                      | 768          | 11,594          | 375          | 632              | 10,587                      | 42.4              | 34.3             |
| Year                     | 39,418          | 184  | 847                      | 3,134        | 43,583          | 1,332        | 632              | 41,619                      | 167.4             | 134.7            |
| 1990                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| I                        | 9,581           | 65   | 632                      | 822          | 11,100          | 302          | 753              | 10,045                      | 40.1              | 32.3             |
| II                       | 9,542           | 27   | 753                      | 816          | 11,138          | 296          | 695              | 10,147                      | 40.5              | 32.3             |
| III                      | 9,618           | 26   | 695                      | 853          | 11,192          | 306          | 604              | 10,282                      | 40.9              | 32.8             |
| Year 2/                  | 38,616          | 182  | 632                      | 3,303        | 42,733          | 1,255        | 688              | 40,790                      | 162.5             | 130.4            |
| 1991                     |                 |      |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                  | 39,405          | 182  | 688                      | 3,290        | 43,565          | 1,322        | 701              | 41,542                      | 164.2             | 132.0            |

1/ May not add due to rounding. 2/ Forecast. 3/ Beginning in 1989 veal trade no longer reported separately.



Table 51--Poultry supply and utilization

| Year           | Slaughter                          |       |        | Begin-<br>ning<br>stocks | Total<br>supply | Ex-<br>ports | Ending<br>stocks | Total<br>disap-<br>pearance | Per capita<br>Retail<br>weight |
|----------------|------------------------------------|-------|--------|--------------------------|-----------------|--------------|------------------|-----------------------------|--------------------------------|
|                | Feder-<br>ally<br>Inspected        | Other | Total  |                          |                 |              |                  |                             |                                |
|                | - - - - - Million pounds - - - - - |       |        |                          |                 |              |                  |                             |                                |
|                |                                    |       |        |                          |                 |              |                  |                             | Pounds                         |
| Young chicken: |                                    |       |        |                          |                 |              |                  |                             |                                |
| 1989           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 4,129                              | 21    | 4,150  | 36                       | 4,186           | 175          | 32               | 3,978                       | 16.1                           |
| II             | 4,389                              | 24    | 4,413  | 32                       | 4,445           | 208          | 34               | 4,202                       | 16.9                           |
| III            | 4,395                              | 25    | 4,420  | 34                       | 4,455           | 190          | 36               | 4,229                       | 17.0                           |
| IV             | 4,420                              | 25    | 4,445  | 36                       | 4,481           | 240          | 38               | 4,203                       | 16.8                           |
| Year           | 17,334                             | 94    | 17,428 | 36                       | 17,464          | 814          | 38               | 16,612                      | 66.8                           |
| 1990           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 4,495                              | 26    | 4,521  | 38                       | 4,559           | 277          | 31               | 4,250                       | 17.0                           |
| II             | 4,657                              | 28    | 4,685  | 31                       | 4,717           | 310          | 30               | 4,377                       | 17.5                           |
| III 2/         | 4,613                              | 27    | 4,641  | 30                       | 4,671           | 260          | 24               | 4,387                       | 17.5                           |
| Year 3/        | 18,445                             | 107   | 18,552 | 38                       | 18,590          | 1,107        | 30               | 17,453                      | 69.6                           |
| 1991           |                                    |       |        |                          |                 |              |                  |                             |                                |
| Year 3/        | 19,500                             | 106   | 19,606 | 30                       | 19,636          | 1,100        | 30               | 18,506                      | 73.1                           |
| Other chicken: |                                    |       |        |                          |                 |              |                  |                             |                                |
| 1989           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 137                                | 12    | 148    | 157                      | 305             | 5            | 146              | 153                         | 0.6                            |
| II             | 135                                | 12    | 147    | 146                      | 293             | 4            | 158              | 131                         | 0.5                            |
| III            | 132                                | 11    | 143    | 158                      | 301             | 6            | 155              | 139                         | 0.6                            |
| IV             | 126                                | 11    | 136    | 155                      | 292             | 8            | 189              | 95                          | 0.4                            |
| Year           | 530                                | 45    | 575    | 157                      | 731             | 24           | 189              | 518                         | 2.1                            |
| 1990           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 133                                | 11    | 145    | 189                      | 334             | 8            | 219              | 106                         | 0.4                            |
| II             | 145                                | 12    | 158    | 219                      | 377             | 7            | 236              | 134                         | 0.5                            |
| III 2/         | 128                                | 11    | 139    | 236                      | 375             | 6            | 201              | 168                         | 0.7                            |
| Year 3/        | 542                                | 46    | 588    | 189                      | 777             | 28           | 200              | 549                         | 2.2                            |
| 1991           |                                    |       |        |                          |                 |              |                  |                             |                                |
| Year 3/        | 535                                | 46    | 581    | 200                      | 781             | 26           | 200              | 555                         | 2.2                            |
| Total chicken: |                                    |       |        |                          |                 |              |                  |                             |                                |
| 1989           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 4,266                              | 33    | 4,299  | 192                      | 4,491           | 181          | 179              | 4,131                       | 16.7                           |
| II             | 4,524                              | 35    | 4,559  | 179                      | 4,738           | 213          | 192              | 4,333                       | 17.4                           |
| III            | 4,527                              | 36    | 4,563  | 192                      | 4,756           | 196          | 191              | 4,368                       | 17.6                           |
| IV             | 4,546                              | 35    | 4,581  | 191                      | 4,773           | 247          | 228              | 4,298                       | 17.2                           |
| Year           | 17,864                             | 139   | 18,003 | 192                      | 18,195          | 838          | 228              | 17,130                      | 68.9                           |
| 1990           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 4,628                              | 37    | 4,665  | 227                      | 4,893           | 285          | 250              | 4,358                       | 17.4                           |
| II             | 4,802                              | 40    | 4,843  | 250                      | 5,094           | 317          | 266              | 4,511                       | 18.0                           |
| III 2/         | 4,741                              | 38    | 4,780  | 266                      | 5,046           | 266          | 225              | 4,554                       | 18.2                           |
| Year 3/        | 18,987                             | 153   | 19,140 | 227                      | 19,367          | 1,135        | 230              | 18,002                      | 71.8                           |
| 1991           |                                    |       |        |                          |                 |              |                  |                             |                                |
| Year 3/        | 20,035                             | 152   | 20,187 | 230                      | 20,417          | 1,126        | 230              | 19,061                      | 75.3                           |
| Turkey:        |                                    |       |        |                          |                 |              |                  |                             |                                |
| 1989           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 804                                | 17    | 820    | 250                      | 1,070           | 8            | 269              | 793                         | 3.2                            |
| II             | 1,014                              | 25    | 1,039  | 269                      | 1,308           | 10           | 455              | 844                         | 3.4                            |
| III            | 1,176                              | 30    | 1,206  | 455                      | 1,661           | 12           | 569              | 1,080                       | 4.3                            |
| IV             | 1,181                              | 30    | 1,211  | 569                      | 1,780           | 11           | 236              | 1,534                       | 6.1                            |
| Year           | 4,175                              | 101   | 4,276  | 250                      | 4,526           | 41           | 236              | 4,250                       | 17.1                           |
| 1990           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 983                                | 23    | 1,007  | 236                      | 1,243           | 11           | 319              | 912                         | 3.6                            |
| II             | 1,102                              | 27    | 1,129  | 319                      | 1,448           | 10           | 489              | 949                         | 3.8                            |
| III 2/         | 1,221                              | 32    | 1,253  | 489                      | 1,742           | 12           | 617              | 1,113                       | 4.4                            |
| Year 3/        | 4,546                              | 112   | 4,659  | 236                      | 4,895           | 45           | 260              | 4,590                       | 18.3                           |
| 1991           |                                    |       |        |                          |                 |              |                  |                             |                                |
| Year 3/        | 4,810                              | 117   | 4,927  | 260                      | 5,187           | 45           | 250              | 4,892                       | 19.3                           |
| Total poultry: |                                    |       |        |                          |                 |              |                  |                             |                                |
| 1989           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 5,070                              | 49    | 5,119  | 442                      | 5,561           | 189          | 448              | 4,924                       | 19.9                           |
| II             | 5,538                              | 60    | 5,599  | 448                      | 6,047           | 223          | 647              | 5,177                       | 20.8                           |
| III            | 5,704                              | 66    | 5,770  | 647                      | 6,416           | 208          | 760              | 5,448                       | 21.9                           |
| IV             | 5,727                              | 66    | 5,792  | 760                      | 6,553           | 258          | 463              | 5,831                       | 23.3                           |
| Year           | 22,039                             | 241   | 22,280 | 442                      | 22,722          | 878          | 463              | 21,380                      | 85.9                           |
| 1990           |                                    |       |        |                          |                 |              |                  |                             |                                |
| I              | 5,611                              | 60    | 5,672  | 463                      | 6,135           | 297          | 570              | 5,269                       | 21.0                           |
| II             | 5,904                              | 68    | 5,972  | 570                      | 6,542           | 327          | 755              | 5,460                       | 21.8                           |
| III 2/         | 5,963                              | 70    | 6,033  | 755                      | 6,788           | 278          | 842              | 5,668                       | 22.6                           |
| Year 3/        | 23,533                             | 265   | 23,799 | 463                      | 24,262          | 1,180        | 490              | 22,592                      | 90.0                           |
| 1991           |                                    |       |        |                          |                 |              |                  |                             |                                |
| Year 3/        | 24,845                             | 269   | 25,114 | 490                      | 25,604          | 1,171        | 480              | 23,953                      | 94.7                           |

1/ May not add due to rounding. 2/ Estimate. 3/ Forecast.



Table 52--Total red meat and poultry supply and utilization, carcass and retail weight 1/

| Year                        | Total<br>produc-<br>tion | Begin-<br>ning<br>stocks | Im-<br>ports | Total<br>supply | Ex-<br>ports | Ending<br>stocks | Total<br>disap-<br>pearance | Per capita        |                  |
|-----------------------------|--------------------------|--------------------------|--------------|-----------------|--------------|------------------|-----------------------------|-------------------|------------------|
|                             |                          |                          |              |                 |              |                  |                             | Carcass<br>weight | Retail<br>weight |
| -----Million pounds-----    |                          |                          |              |                 |              |                  |                             | -----Pounds-----  |                  |
| Total red meat and poultry: |                          |                          |              |                 |              |                  |                             |                   |                  |
| 1989                        |                          |                          |              |                 |              |                  |                             |                   |                  |
| I                           | 14,778                   | 1,289                    | 833          | 16,900          | 479          | 1,328            | 15,093                      | 60.9              | 52.9             |
| II                          | 15,497                   | 1,328                    | 796          | 17,621          | 563          | 1,442            | 15,616                      | 62.8              | 54.6             |
| III                         | 15,645                   | 1,442                    | 737          | 17,823          | 553          | 1,416            | 15,854                      | 63.6              | 55.4             |
| IV                          | 15,962                   | 1,416                    | 768          | 18,147          | 615          | 1,095            | 16,436                      | 65.9              | 57.7             |
| Year                        | 61,882                   | 1,289                    | 3,134        | 66,305          | 2,210        | 1,095            | 62,999                      | 253.2             | 220.5            |
| 1990                        |                          |                          |              |                 |              |                  |                             |                   |                  |
| I                           | 15,318                   | 1,095                    | 822          | 17,235          | 599          | 1,323            | 15,314                      | 61.2              | 53.3             |
| II                          | 15,541                   | 1,323                    | 816          | 17,680          | 623          | 1,450            | 15,607                      | 62.2              | 54.1             |
| III                         | 15,677                   | 1,450                    | 853          | 17,980          | 584          | 1,446            | 15,950                      | 63.5              | 55.3             |
| Year 2/                     | 62,597                   | 1,095                    | 3,303        | 66,995          | 2,435        | 1,178            | 63,382                      | 252.6             | 220.5            |
| 1991                        |                          |                          |              |                 |              |                  |                             |                   |                  |
| Year 2/                     | 64,701                   | 1,178                    | 3,290        | 69,169          | 2,493        | 1,181            | 65,495                      | 258.8             | 226.7            |

1/ May not add due to rounding. 2/ Forecast.

Table 53--Egg supply and utilization (population includes military) 1/

| Year                    | Pro-<br>duction | Beginning<br>stocks | Breaking<br>egg use | Imports<br>2/ | Total<br>supply | Exports | Hatching<br>egg use<br>3/ | Ending<br>stocks | Consumption |               |
|-------------------------|-----------------|---------------------|---------------------|---------------|-----------------|---------|---------------------------|------------------|-------------|---------------|
|                         |                 |                     |                     |               |                 |         |                           |                  | Total       | Per<br>capita |
| -----Million dozen----- |                 |                     |                     |               |                 |         |                           |                  |             |               |
| Total eggs              |                 |                     |                     |               |                 |         |                           |                  |             |               |
| 1989                    |                 |                     |                     |               |                 |         |                           |                  |             |               |
| I                       | 1,388.8         | 15.2                | ---                 | 1.9           | 1,405.9         | 23.7    | 155.3                     | 11.7             | 1,215.2     | 58.8          |
| II                      | 1,394.1         | 11.7                | ---                 | 8.2           | 1,414.0         | 21.2    | 165.4                     | 12.2             | 1,215.1     | 58.7          |
| III                     | 1,389.2         | 12.2                | ---                 | 10.4          | 1,411.8         | 23.2    | 161.4                     | 11.6             | 1,215.6     | 58.6          |
| IV                      | 1,414.7         | 11.6                | ---                 | 4.6           | 1,430.9         | 23.5    | 160.5                     | 10.7             | 1,236.2     | 59.4          |
| Year                    | 5,586.8         | 15.2                | ---                 | 25.2          | 5,627.1         | 91.6    | 642.8                     | 10.7             | 4,882.1     | 235.5         |
| 1990                    |                 |                     |                     |               |                 |         |                           |                  |             |               |
| I                       | 1,390.3         | 10.7                | ---                 | 1.9           | 1,402.8         | 18.4    | 167.3                     | 13.4             | 1,203.7     | 57.7          |
| II                      | 1,412.8         | 13.4                | ---                 | 4.1           | 1,430.4         | 18.8    | 173.1                     | 14.4             | 1,224.1     | 58.6          |
| III                     | 1,411.5         | 14.4                | ---                 | 3.5           | 1,429.4         | 25.0    | 168.9                     | 12.0             | 1,223.5     | 58.5          |
| Year 4/                 | 5,649.6         | 10.7                | ---                 | 12.0          | 5,672.2         | 87.2    | 679.2                     | 12.0             | 4,893.9     | 234.0         |
| 1991                    |                 |                     |                     |               |                 |         |                           |                  |             |               |
| Year 4/                 | 5,715.0         | 12.0                | ---                 | 8.0           | 5,735.0         | 96.0    | 720.0                     | 12.0             | 4,907.0     | 232.7         |
| Shell eggs              |                 |                     |                     |               |                 |         |                           |                  |             |               |
| 1989                    |                 |                     |                     |               |                 |         |                           |                  |             |               |
| I                       | 1,388.8         | 0.3                 | 219.6               | 1.4           | 1,170.9         | 9.1     | 155.3                     | 0.5              | 1,006.0     | 48.7          |
| II                      | 1,394.1         | 0.5                 | 257.3               | 7.6           | 1,144.8         | 9.7     | 165.4                     | 0.8              | 968.9       | 46.8          |
| III                     | 1,389.2         | 0.8                 | 245.1               | 9.9           | 1,154.8         | 16.2    | 161.4                     | 0.7              | 976.5       | 47.0          |
| IV                      | 1,414.7         | 0.7                 | 227.0               | 4.1           | 1,192.4         | 17.4    | 160.5                     | 0.4              | 1,014.1     | 48.7          |
| Year                    | 5,586.8         | 0.3                 | 949.0               | 22.9          | 4,662.9         | 52.4    | 642.8                     | 0.4              | 3,967.4     | 190.6         |
| 1990                    |                 |                     |                     |               |                 |         |                           |                  |             |               |
| I                       | 1,390.3         | 0.4                 | 240.6               | 1.4           | 1,151.4         | 12.1    | 167.3                     | 0.7              | 971.3       | 46.6          |
| II                      | 1,412.8         | 0.7                 | 268.0               | 3.8           | 1,149.4         | 12.1    | 173.1                     | 0.7              | 961.0       | 46.1          |
| III                     | 1,411.5         | 0.7                 | 274.8               | 3.1           | 1,140.4         | 16.6    | 168.9                     | 0.5              | 954.4       | 45.6          |

1/ Totals may not add due to rounding. 2/ Shell eggs and approximate shell-egg equivalent of egg products.

3/ Hatching egg use for 1986-present calculated by a new method. 4/ Forecast. --- Not applicable for total egg supply and utilization.



Table 54--Selected price statistics for meat animals and meat, 1989-1990

| Item                   | Nov.   | Dec.  | Jan.   | Feb.   | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.   |
|------------------------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Dollars per cwt        |        |       |        |        |        |        |        |        |        |        |        |        |
| Slaughter Steers:      |        |       |        |        |        |        |        |        |        |        |        |        |
| Omaha                  |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, 1000-1100 lb   | 72.48  | 75.21 | 76.73  | 76.61  | 78.15  | 79.36  | 77.57  | 75.63  | 74.46  | 76.22  | 75.75  | 77.50  |
| Select, 1000-1100 lb   | 69.63  | 71.99 | 74.02  | 73.92  | 75.46  | 77.00  | 75.91  | 73.88  | 72.65  | 73.97  | 73.57  | 75.50  |
| California             |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, 1000-1100 lb   | 74.88  | 76.63 | 77.19  | 78.67  | 78.38  | 78.13  | 75.90  | 74.34  | 74.75  | 76.70  | 76.75  | 77.58  |
| Colorado               |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, 1100-1300 lb   | 75.21  | 77.43 | 78.45  | 78.30  | 79.30  | 79.78  | 78.13  | 76.61  | 75.35  | 77.63  | 78.07  | 79.65  |
| Texas                  |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, 1000-1100 lb   | 75.47  | 77.97 | 79.02  | 78.62  | 79.31  | 80.00  | 78.14  | 76.73  | 75.07  | 77.61  | 78.05  | 79.82  |
| Slaughter heifers:     |        |       |        |        |        |        |        |        |        |        |        |        |
| Omaha                  |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, 1000-1200 lb   | 73.30  | 75.71 | 77.69  | 77.48  | 78.42  | 79.51  | 77.82  | 76.08  | 74.77  | 76.46  | 76.41  | 78.38  |
| Select, 900-1000 lb    | 69.38  | 71.58 | 73.32  | 73.15  | 74.19  | 75.63  | 74.56  | 72.41  | 71.04  | 72.28  | 72.17  | 74.27  |
| Cows:                  |        |       |        |        |        |        |        |        |        |        |        |        |
| Omaha                  |        |       |        |        |        |        |        |        |        |        |        |        |
| Commercial             | 45.67  | 49.00 | 49.38  | 52.13  | 54.04  | 53.77  | 54.96  | 55.63  | 54.27  | 56.03  | 54.40  | 51.73  |
| Breaking Utility       | 46.60  | 49.38 | 49.78  | 52.79  | 54.67  | 54.48  | 55.41  | 56.04  | 54.56  | 56.07  | 54.33  | 51.10  |
| Boning Utility         | 48.70  | 50.72 | 51.22  | 54.86  | 55.96  | 55.84  | 56.37  | 58.42  | 56.88  | 56.90  | 54.46  | 53.23  |
| Canner                 | 42.57  | 42.48 | 43.27  | 46.83  | 49.25  | 49.21  | 50.12  | 52.00  | 50.58  | 51.75  | 48.71  | 45.80  |
| Cutter                 | 45.67  | 48.29 | 48.40  | 51.59  | 54.92  | 54.67  | 55.38  | 56.31  | 54.77  | 55.77  | 53.63  | 51.08  |
| Vealers: 1/            |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, New York       | 94.50  | 97.88 | 99.35  | 104.38 | 101.50 | 102.88 | 102.00 | 99.88  | 96.00  | 94.60  | 95.50  | 95.00  |
| Feeder steers:         |        |       |        |        |        |        |        |        |        |        |        |        |
| Kansas City            |        |       |        |        |        |        |        |        |        |        |        |        |
| Medium No. 1,          |        |       |        |        |        |        |        |        |        |        |        |        |
| 400-500 lb             | 96.63  | 95.13 | 97.40  | 101.00 | 102.88 | 104.88 | 105.30 | 108.50 | 107.50 | 105.50 | nq     | nq     |
| 600-700 lb             | 87.38  | 86.25 | 85.70  | 84.88  | 87.50  | 90.81  | 91.90  | 94.13  | 93.50  | 92.30  | 91.50  | nq     |
| All weights and grades | 82.65  | 82.30 | 82.47  | 82.86  | 83.15  | 85.42  | 85.14  | 87.77  | 86.82  | 87.30  | 87.58  | nq     |
| Okla. City             |        |       |        |        |        |        |        |        |        |        |        |        |
| Medium No. 1           |        |       |        |        |        |        |        |        |        |        |        |        |
| 400-500 lb             | 102.03 | 99.77 | 101.23 | 105.13 | 105.89 | 111.35 | 109.74 | 106.14 | 106.03 | 110.42 | 106.41 | 104.25 |
| 600-700 lb             | 86.34  | 88.67 | 87.34  | 85.35  | 87.85  | 91.13  | 93.71  | 94.74  | 93.35  | 96.50  | 94.41  | 92.14  |
| 700-800 lb             | 85.15  | 87.11 | 84.86  | 82.14  | 82.18  | 84.49  | 86.80  | 90.39  | 90.02  | 91.54  | 90.91  | 90.30  |
| Amarillo               |        |       |        |        |        |        |        |        |        |        |        |        |
| Medium No. 1,          |        |       |        |        |        |        |        |        |        |        |        |        |
| 600-700 lb             | 82.80  | 85.17 | 85.45  | 84.13  | 86.13  | 85.88  | 87.30  | 87.63  | 89.44  | 94.10  | 90.88  | 90.00  |
| Georgia Auctions       |        |       |        |        |        |        |        |        |        |        |        |        |
| Medium No. 1,          |        |       |        |        |        |        |        |        |        |        |        |        |
| 600-700 lb             | 79.00  | 79.33 | 80.40  | 82.00  | 83.75  | 86.75  | 86.80  | 87.13  | 86.67  | 87.60  | 85.00  | 82.20  |
| Medium No. 2,          |        |       |        |        |        |        |        |        |        |        |        |        |
| 400-500 lb             | 81.00  | 80.33 | 83.20  | 89.25  | 92.13  | 93.13  | 90.90  | 89.88  | 88.17  | 91.40  | 87.63  | 86.90  |
| Feeder heifers:        |        |       |        |        |        |        |        |        |        |        |        |        |
| Medium No. 1,          |        |       |        |        |        |        |        |        |        |        |        |        |
| Kansas City            |        |       |        |        |        |        |        |        |        |        |        |        |
| 400-500 lb             | 86.50  | 84.38 | 85.60  | 89.50  | 92.13  | 92.88  | 95.20  | 94.38  | 91.50  | 91.00  | nq     | nq     |
| 600-700 lb             | 81.88  | 80.88 | 80.80  | 80.75  | 80.38  | 84.69  | 85.50  | 84.75  | 84.75  | 85.20  | 85.50  | nq     |
| Okla. City             |        |       |        |        |        |        |        |        |        |        |        |        |
| 400-500 lb             | 86.59  | 83.01 | 87.64  | 90.39  | 92.14  | 95.47  | 96.03  | 94.30  | 91.53  | 96.30  | 92.97  | 91.23  |
| 600-700 lb             | 80.64  | 82.91 | 81.83  | 79.81  | 80.83  | 83.10  | 85.50  | 87.14  | 87.61  | 89.74  | 87.49  | 85.25  |
| Slaughter hogs:        |        |       |        |        |        |        |        |        |        |        |        |        |
| Barrows and gilts      |        |       |        |        |        |        |        |        |        |        |        |        |
| Omaha No. 1 & 2,       |        |       |        |        |        |        |        |        |        |        |        |        |
| 230-240 lb             | 47.15  | 51.03 | 49.33  | 50.33  | 53.03  | 54.80  | 63.54  | 61.71  | 63.18  | 57.59  | 55.91  | 57.83  |
| All weights            | 45.92  | 49.68 | 48.52  | 47.22  | 51.76  | 54.32  | 62.21  | 60.71  | 62.31  | 56.94  | 55.34  | 57.71  |
| Sioux City             | 46.39  | 49.65 | 48.41  | 49.48  | 52.56  | 54.63  | 62.80  | 61.34  | 62.54  | 56.37  | 55.64  | 58.02  |
| 7 markets 2/           | 45.77  | 49.33 | 47.94  | 48.51  | 51.91  | 54.11  | 62.18  | 60.75  | 61.87  | 56.05  | 55.10  | 57.15  |
| Sows:                  |        |       |        |        |        |        |        |        |        |        |        |        |
| 7 markets 2/           | 38.53  | 41.73 | 43.88  | 43.91  | 47.61  | 51.49  | 54.27  | 52.45  | 49.20  | 50.53  | 47.04  | 50.38  |
| Feeder pigs:           |        |       |        |        |        |        |        |        |        |        |        |        |
| No. 1 & 2, So. Mo.,    |        |       |        |        |        |        |        |        |        |        |        |        |
| 40-50 lb (per hd.)     | 38.33  | 36.21 | 44.58  | 54.41  | 63.19  | 64.97  | 56.80  | 47.32  | 46.35  | 45.85  | 45.91  | 52.33  |
| Slaughter lambs:       |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, San Angelo     | 56.06  | 61.00 | 54.80  | 60.38  | 63.69  | 63.13  | 62.25  | 53.56  | 53.25  | 51.20  | 51.75  | 52.50  |
| Choice, So. St. Paul   | 54.60  | 57.69 | 55.88  | 61.68  | 63.43  | 57.43  | 61.70  | 53.70  | 51.71  | 49.94  | 49.00  | 50.20  |
| Ewes, Good,            |        |       |        |        |        |        |        |        |        |        |        |        |
| San Angelo             | 35.25  | 39.42 | 38.30  | 38.47  | 38.81  | 36.50  | 33.25  | 32.38  | 34.83  | 36.60  | 32.88  | 32.00  |
| So. St. Paul           | 16.70  | 23.52 | 23.30  | 22.00  | 22.65  | 17.85  | 13.88  | 13.93  | 15.47  | 19.74  | 14.91  | 16.69  |
| Feeder lambs:          |        |       |        |        |        |        |        |        |        |        |        |        |
| Choice, San Angelo     | 74.88  | 76.00 | 72.10  | 74.88  | 75.63  | 71.31  | 64.30  | 56.50  | 53.75  | 58.30  | 55.75  | 55.90  |
| Choice, So. St. Paul   | 68.08  | 70.65 | 65.96  | 68.65  | 70.00  | 62.38  | 64.88  | 56.45  | 51.16  | 48.36  | 49.50  | 50.30  |
| Farm prices:           |        |       |        |        |        |        |        |        |        |        |        |        |
| Beef cattle            | 69.80  | 71.00 | 73.70  | 74.60  | 74.20  | 74.60  | 74.40  | 74.40  | 73.60  | 76.10  | 75.00  | 75.10  |
| Calves                 | 86.70  | 89.10 | 91.00  | 96.00  | 99.10  | 100.40 | 101.00 | 98.10  | 96.50  | 99.20  | 95.00  | 95.60  |
| Hogs                   | 45.00  | 48.20 | 47.30  | 48.20  | 51.30  | 53.80  | 61.20  | 60.10  | 60.80  | 55.90  | 54.30  | 56.90  |
| Sheep                  | 29.50  | 31.10 | 32.20  | 30.90  | 30.00  | 23.50  | 19.70  | 19.60  | 24.70  | 24.30  | 18.90  | 19.80  |
| Lambs                  | 58.70  | 59.00 | 56.40  | 59.80  | 66.00  | 62.90  | 59.80  | 55.40  | 54.40  | 54.00  | 52.80  | 52.80  |



Table 54--Selected price statistics for meat animals and meat, 1989-1990--Continued

| Item                        | Nov.   | Dec.   | Jan.   | Feb.   | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.   |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Dollars per cwt             |        |        |        |        |        |        |        |        |        |        |        |        |
| Meat prices:                |        |        |        |        |        |        |        |        |        |        |        |        |
| Wholesale                   |        |        |        |        |        |        |        |        |        |        |        |        |
| Central U.S. markets        |        |        |        |        |        |        |        |        |        |        |        |        |
| Cow beef, Canner and Cutter | 92.92  | 100.73 | 99.89  | 100.95 | 102.04 | 100.61 | 101.29 | 101.51 | 101.62 | 105.22 | 101.93 | 96.00  |
| Boxed beef cut-out          |        |        |        |        |        |        |        |        |        |        |        |        |
| Choice, 1-3                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 550-700 lb                  | 115.06 | 119.52 | 121.75 | 120.97 | 122.10 | 123.62 | 124.56 | 121.53 | 118.54 | 121.52 | 121.18 | 124.96 |
| 700-850 lb                  | 113.16 | 117.91 | 121.24 | 120.28 | 121.61 | 123.64 | 125.98 | 122.56 | 118.85 | 121.26 | 120.33 | 124.41 |
| Select, 1-3                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 550-700 lb                  | 107.88 | 110.52 | 115.85 | 117.22 | 118.79 | 119.31 | 115.75 | 114.20 | 113.43 | 115.13 | 115.17 | 116.84 |
| 700+ lb                     |        |        | 115.80 | 117.03 | 118.62 | 119.25 | 116.54 | 114.94 | 113.58 | 115.23 | 114.66 | 115.78 |
| Cutter Cows                 | 92.92  | 100.73 | 99.89  | 100.95 | 102.04 | 100.61 | 101.29 | 101.51 | 101.62 | 112.13 | 101.93 | 102.58 |
| Pork loins                  |        |        |        |        |        |        |        |        |        |        |        |        |
| 14-18 lb 3/                 | 91.75  | 107.28 | 101.36 | 107.75 | 117.26 | 120.68 | 136.06 | 125.62 | 144.14 | 119.56 | 121.64 | 113.71 |
| Pork bellies                |        |        |        |        |        |        |        |        |        |        |        |        |
| 12-14 lb                    | 49.96  | 42.23  | 48.65  | 42.53  | 42.60  | 52.60  | 61.48  | 65.15  | 53.18  | 51.08  | 51.31  | 59.83  |
| Hams, skinned               |        |        |        |        |        |        |        |        |        |        |        |        |
| 14-17 lb                    | 87.00  | 78.89  | 68.44  | 76.50  | 79.00  | 77.33  | 81.60  | ng     | 91.00  | ng     | 101.75 | 107.24 |
| 17-20 lb                    | 87.48  | 84.38  | 67.95  | 75.38  | 77.68  | 74.11  | 81.67  | 85.60  | 89.20  | 91.29  | 95.82  | 104.32 |
| Pork cut-out                |        |        |        |        |        |        |        |        |        |        |        |        |
| value 4/                    | 64.78  | 67.26  | 63.49  | 65.30  | 69.54  | 72.14  | 81.49  | 80.61  | 82.31  | 76.81  | 76.16  | 77.98  |
| East Coast                  |        |        |        |        |        |        |        |        |        |        |        |        |
| Lamb, Choice and Prime      |        |        |        |        |        |        |        |        |        |        |        |        |
| 35-45 lb                    | 124.60 | 136.22 | 127.05 | 142.81 | 145.25 | 135.56 | 128.75 | 119.94 | 124.88 | 118.25 | 117.88 | 122.45 |
| 55-65 lb                    | 109.65 | 122.72 | 112.25 | 127.81 | 135.25 | 123.38 | 125.25 | 120.25 | 124.88 | 120.25 | 120.00 | 119.85 |
| Cents per lb                |        |        |        |        |        |        |        |        |        |        |        |        |
| Retail                      |        |        |        |        |        |        |        |        |        |        |        |        |
| Beef                        |        |        |        |        |        |        |        |        |        |        |        |        |
| Choice                      | 266.4  | 269.4  | 274.4  | 271.0  | 272.5  | 277.9  | 283.6  | 282.1  | 279.9  | 280.6  | 280.6  | 282.7  |
| All fresh                   | 243.7  | 245.4  | 247.8  | 249.1  | 249.1  | 252.9  | 251.5  | 254.0  | 255.8  | 254.7  | 256.4  | 259.4  |
| Pork                        | 189.6  | 191.2  | 195.1  | 196.5  | 197.0  | 200.9  | 206.2  | 218.1  | 222.2  | 224.9  | 220.8  | 223.2  |
| Indexes, 1982-84=100        |        |        |        |        |        |        |        |        |        |        |        |        |
| Price indexes: (BLS)        |        |        |        |        |        |        |        |        |        |        |        |        |
| Retail meats                | 119.3  | 120.0  | 122.3  | 123.5  | 124.0  | 125.2  | 126.6  | 129.6  | 130.3  | 130.5  | 131.0  | 131.7  |
| Beef and veal               | 121.3  | 122.1  | 124.5  | 126.2  | 126.6  | 128.0  | 128.5  | 129.0  | 129.2  | 128.5  | 129.5  | 130.1  |
| Pork                        | 116.8  | 117.2  | 119.7  | 119.7  | 121.0  | 121.6  | 125.5  | 132.9  | 134.8  | 136.5  | 135.4  | 136.4  |
| Other meats                 | 119.0  | 119.5  | 121.6  | 122.9  | 122.7  | 124.4  | 124.2  | 127.4  | 127.9  | 128.0  | 129.8  | 130.0  |
| Poultry                     | 126.8  | 127.8  | 128.6  | 130.5  | 134.8  | 132.1  | 132.3  | 134.0  | 135.3  | 133.6  | 134.6  | 133.7  |
| Livestock-feed ratios       |        |        |        |        |        |        |        |        |        |        |        |        |
| Omaha: 5/                   |        |        |        |        |        |        |        |        |        |        |        |        |
| Steer-corn                  | 32.2   | 32.8   | 34.2   | 34.0   | 32.6   | 31.1   | 29.3   | 27.9   | 28.5   | 30.9   | 34.5   | 36.5   |
| Hog-corn                    | 20.1   | 21.7   | 21.6   | 22.0   | 21.9   | 21.2   | 23.6   | 22.4   | 23.9   | 23.1   | 25.1   | 27.0   |

1/ Beginning Jan. 1989 New York auctions (150-250 lb). 2/ St. Louis N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. 3/ Prior to 1984, 8-14 lb; 1984 and 1985, 14-17 lb; 1986, 14-18 lb. 4/ U.S. #2, 175 lb carcass. 5/ Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight.



Table 55--Selected marketings, slaughter, stocks, and trade for meat animals and meat, 1989-1990

| Item                     | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1,000 head               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Federally inspected:     |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Slaughter                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Cattle                   | 2,706 | 2,876 | 2,694 | 2,600 | 2,775 | 2,437 | 2,696 | 2,552 | 2,920 | 2,873 | 2,789 | 2,918 | 2,553 |
| Steers                   | 1,320 | 1,332 | 1,257 | 1,245 | 1,324 | 1,208 | 1,363 | 1,314 | 1,511 | 1,486 | 1,418 | 1,475 | 1,245 |
| Heifers                  | 853   | 904   | 789   | 766   | 807   | 749   | 814   | 751   | 874   | 894   | 889   | 906   | 822   |
| Cows                     | 477   | 578   | 591   | 542   | 590   | 434   | 469   | 437   | 478   | 438   | 429   | 475   | 433   |
| Bulls and stags          | 56    | 62    | 58    | 47    | 54    | 45    | 50    | 49    | 57    | 54    | 52    | 62    | 53    |
| Calves                   | 173   | 191   | 175   | 167   | 175   | 145   | 165   | 128   | 137   | 132   | 139   | 147   | 132   |
| Sheep and lambs          | 441   | 468   | 467   | 457   | 479   | 431   | 481   | 466   | 465   | 426   | 430   | 463   | 422   |
| Hogs                     | 7,493 | 7,823 | 7,815 | 7,012 | 7,407 | 6,643 | 7,279 | 6,785 | 6,799 | 6,152 | 5,983 | 7,110 | 6,722 |
| Percentage sows          | 4.9   | 4.6   | 4.5   | 4.7   | 4.5   | 3.7   | 3.9   | 4.1   | 4.6   | 5.3   | 5.5   | 5.2   | 4.6   |
| Pounds                   |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Average live wt per head |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Cattle                   | 1,154 | 1,156 | 1,159 | 1,156 | 1,150 | 1,150 | 1,136 | 1,117 | 1,113 | 1,120 | 1,128 | 1,146 | 1,149 |
| Calves                   | 255   | 259   | 250   | 237   | 246   | 261   | 264   | 270   | 285   | 285   | 278   | 287   | 290   |
| Sheep and lambs          | 120   | 124   | 127   | 129   | 129   | 131   | 130   | 126   | 128   | 126   | 123   | 122   | 123   |
| Hogs                     | 246   | 248   | 251   | 250   | 249   | 248   | 249   | 250   | 251   | 252   | 249   | 249   | 247   |
| Average dressed wt       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef                     | 696   | 696   | 692   | 688   | 684   | 687   | 682   | 672   | 676   | 678   | 685   | 696   | 698   |
| Veal                     | 155   | 157   | 152   | 144   | 149   | 158   | 162   | 168   | 181   | 185   | 180   | 185   | 187   |
| Lamb and mutton          | 60    | 64    | 65    | 66    | 66    | 67    | 66    | 64    | 65    | 64    | 63    | 62    | 62    |
| Pork                     | 176   | 178   | 181   | 179   | 180   | 179   | 179   | 180   | 181   | 182   | 180   | 180   | 179   |
| Million pounds           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Production               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef                     | 1,874 | 1,992 | 1,855 | 1,783 | 1,889 | 1,668 | 1,831 | 1,709 | 1,967 | 1,943 | 1,903 | 2,024 | 1,777 |
| Veal                     | 26    | 30    | 26    | 24    | 26    | 23    | 26    | 21    | 24    | 24    | 24    | 27    | 24    |
| Lamb and mutton          | 27    | 29    | 30    | 30    | 31    | 28    | 32    | 30    | 30    | 27    | 27    | 29    | 26    |
| Pork                     | 1,318 | 1,387 | 1,410 | 1,252 | 1,327 | 1,186 | 1,300 | 1,219 | 1,228 | 1,116 | 1,075 | 1,278 | 1,199 |
| Commercial: 1/           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1,000 head               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Slaughter                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Cattle 1/                | 2,774 | 2,964 | 2,785 | 2,681 | 2,851 | 2,502 | 2,764 | 2,618 | 2,989 | 2,934 | 2,852 | 2,983 | 2,614 |
| Steers                   | 1,353 | 1,372 | 1,299 | 1,284 | 1,360 | 1,241 | 1,398 | 1,348 | 1,547 | 1,518 | 1,450 | 1,508 | 1,275 |
| Heifers                  | 875   | 932   | 815   | 789   | 829   | 769   | 834   | 771   | 894   | 913   | 910   | 926   | 841   |
| Cows                     | 489   | 596   | 611   | 559   | 606   | 446   | 481   | 448   | 490   | 448   | 439   | 486   | 443   |
| Bulls and Stags          | 57    | 64    | 60    | 48    | 56    | 46    | 51    | 51    | 58    | 55    | 53    | 63    | 55    |
| Calves                   | 179   | 198   | 182   | 172   | 181   | 150   | 171   | 133   | 142   | 137   | 144   | 152   | 138   |
| Sheep and Lambs          | 456   | 484   | 482   | 470   | 489   | 441   | 493   | 487   | 478   | 440   | 447   | 482   | 439   |
| Hogs                     | 7,678 | 8,032 | 8,039 | 7,236 | 7,605 | 6,820 | 7,454 | 6,959 | 6,976 | 6,322 | 6,153 | 7,301 | 6,896 |
| Million pounds           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Production               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef                     | 1,913 | 2,041 | 1,906 | 1,828 | 1,932 | 1,705 | 1,870 | 1,747 | 2,007 | 1,979 | 1,939 | 2,062 | 1,813 |
| Veal                     | 28    | 31    | 28    | 25    | 27    | 24    | 28    | 23    | 26    | 25    | 26    | 28    | 26    |
| Lamb and mutton          | 27    | 30    | 31    | 31    | 32    | 29    | 32    | 31    | 31    | 28    | 28    | 30    | 27    |
| Pork                     | 1,349 | 1,421 | 1,446 | 1,288 | 1,359 | 1,215 | 1,328 | 1,247 | 1,256 | 1,142 | 1,102 | 1,309 | 1,228 |
| Cold storage stocks: 2/  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef                     | 232   | 223   | 237   | 246   | 261   | 269   | 308   | 296   | 272   | 258   | 266   | 240   | 244   |
| Veal                     | 5     | 4     | 4     | 4     | 4     | 4     | 4     | 5     | 5     | 5     | 6     | 6     | 6     |
| Lamb and mutton          | 7     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 10    | 10    | 9     | 9     |
| Pork                     | 278   | 276   | 281   | 256   | 272   | 308   | 297   | 319   | 323   | 293   | 256   | 225   | 225   |
| Total meat               | 557   | 535   | 555   | 536   | 565   | 610   | 638   | 651   | 633   | 592   | 566   | 507   | 507   |
| Trade:                   |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Imports (carcass wt)     |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef and veal 3/         | 144.7 | 177.8 | 180.4 | 195.4 | 202.3 | 189.7 | 206.0 | 173.7 | 188.7 | 210.6 | 195.6 | 209.5 |       |
| Lamb, mutton, and goat   | 4.1   | 5.7   | 4.5   | 6.7   | 4.5   | 3.9   | 4.5   | 3.9   | 4.1   | 5.6   | 4.6   | 5.2   |       |
| Pork                     | 67.5  | 65.9  | 66.8  | 66.8  | 64.0  | 69.2  | 82.8  | 76.3  | 70.9  | 83.5  | 57.6  | 80.6  |       |
| Exports (carcass wt)     |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Beef and veal 3/         | 76.6  | 96.6  | 88.5  | 79.1  | 72.9  | 73.3  | 86.2  | 70.4  | 85.0  | 81.7  | 84.5  | 100.6 |       |
| Lamb and mutton          | 0.2   | 0.1   | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.4   | 0.2   | 0.1   | 0.3   | 0.2   |       |
| Pork                     | 22.5  | 29.4  | 26.1  | 24.7  | 25.2  | 21.3  | 22.9  | 23.0  | 20.1  | 15.6  | 15.0  | 15.6  |       |

1/ Federally inspected and other commercial. Classes estimated. 2/ End of month. Beginning January 1977, excludes beef and pork stocks in cooler. 3/ Beginning January 1989, veal trade is no longer reported separately.



# Impact of Different Cost Assumptions on Long Term Projections for the Broiler Industry

By

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**Abstract:** Increased production efficiencies in the broiler industry has resulted in higher broiler consumption and lower prices relative to other meats. Different assumptions about the trends in costs influence the outcome of long-term projections. Changes in assumptions about cost increases can have about a 4.5 pound effect on projections of per capita broiler consumption by the year 2000. These cost assumptions also impact the projections for beef, pork, and turkeys.

**Keywords:** Broilers, costs, projections, impact, consumption, prices.

During the 1980's, a great deal of attention was focused on the competition between broilers and red meats. Broiler consumption continued to increase as red meat consumption declined. Much has been written on the cause of this shifting pattern. A few suggested causes for changes in broiler market share are changed tastes and preferences, increased fast food market share for broilers and lower relative prices for broilers resulting from increased production efficiency.

Over the past several decades the broiler industry has adopted new technology and integrated production and marketing levels. This has allowed the industry to continue to reduce the real (inflation adjusted) cost of production, and, therefore, reduce the real price of the product and still remain profitable. Some of the gains in broiler consumption relative to beef and pork have been a result of the continuing lower relative prices. However, the ability of the broiler industry to continue this trend is open to question.

In this article we examine three scenarios about trends in broiler production efficiency and how each impacts projections of longer-term production and prices for the livestock and poultry industries. The annual livestock model used in making these projections is estimated using real (inflation adjusted) data (Weimar and Stillman). The results of the three scenarios are expressed in relative terms comparing the rate of change in costs versus the general inflation rate<sup>1/</sup>.

The first scenario assumes that gains in technology have been exhausted and that cost of production for broilers will rise at the same rate as the general inflation rate (constant

real costs). A second set of assumptions has the broiler costs increasing at a lesser rate than the general inflation rate (decreasing real costs). The third scenario assumes that broiler costs will increase at a greater rate than the general inflation rate (increasing real costs). The constant-real-costs scenario will be the base and the other scenarios will be presented as changes from this base to illustrate the impact of different cost assumptions on long-term projections.

## Broiler Industry Cost Structure and Assumptions

The Economic Research Service (ERS) of USDA estimates a cost and return budget for the broiler industry (1). This budget is used in the annual livestock model as the decision criterion for broiler industry production (2). Costs include feed, other production, feed efficiency, and farm-to-wholesale marketing. These costs must be estimated in order to do any longer-term analysis. Assumptions about these costs affect the outcome of the analysis.

Feed costs are based on a ration that is 70 percent corn and 30 percent soybean meal by weight. Additional feed ingredients are included as a percentage markup of primary feed costs. The feed efficiency factor is the number of pounds of feed needed to produce a pound of liveweight broiler and has declined from 2.6 pounds in 1967 to 2.03 pounds in 1984.

Other production costs include chicks, labor, fuel, energy, litter, and veterinary services. Farm-to-wholesale marketing costs include assembly, processing and packing, and distribution. These cost categories have not kept pace with the general inflation rate. There are many reasons for this general trend. Technological advancements, concentration of the industry into larger, more efficient units, and better management are but a few of the reasons for the reduction in real costs.

During the past several years the rate of decrease in real broiler production costs have begun to flatten. This raises

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<sup>1/</sup> Real costs (prices) are actual costs (prices) divided by the Consumer Price Index for all items (CPI). They are deflated and indicate how costs have changed relative to the inflation in the general economy.



questions as to whether the broiler industry has already exploited most of the available efficiencies. If so, real costs may begin to flatten out or even increase.

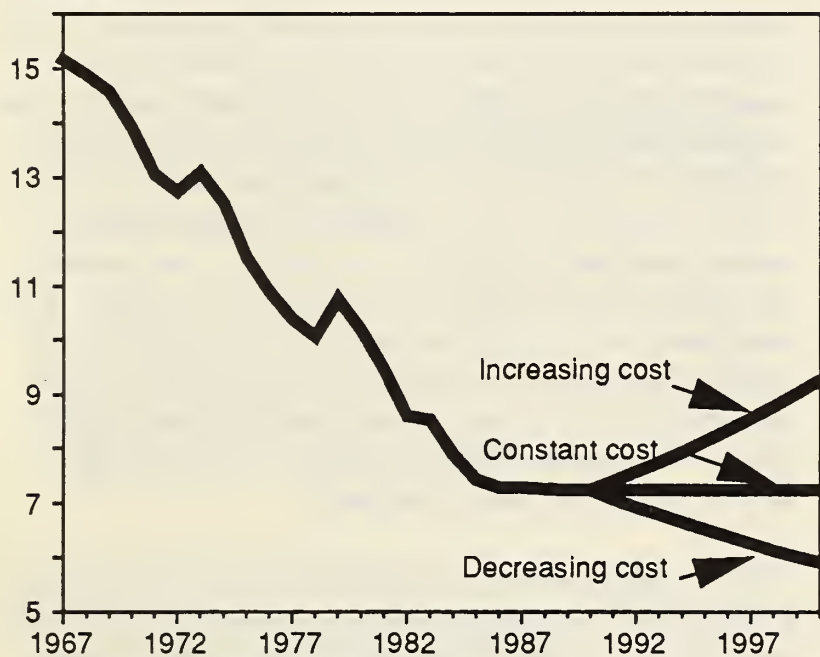
## Long-term Projections

Figure A-1 gives a general indication of the history of real costs and how costs for the broiler industry were adjusted. In general, inflation adjusted costs have decreased over time. The model results for the increasing and decreasing real costs solution will be presented as the change from the base (constant real cost) solution.

Figure A-1

### Real broiler production costs and forecasts

Cents/lb.\*



\* Deflated by CPI base year 1982-84=100

The initial cost variables for each scenario were developed by fitting the inflation-adjusted cost categories to a time trend for the period 1967 to 1989. These equations were then simulated from 1990 to 2000, under different values of the trend variable, to generate the different cost estimates (fig. A-2). For the base solution, the trend variable was held constant at the 1990 level. This allowed the costs to remain constant in real terms. For the decreasing cost scenario the trend variable was allowed to increase at the historic rate. Finally, for the increasing cost scenario the trend was reversed and costs started to increase at the rate that they had been decreasing. Due to the functional form of the trend estimates, the rate of change in costs was slightly different between the decreasing cost scenario and the increasing cost scenario. Because of this difference the results are not symmetric.

These changes in costs were then inputted into the annual livestock model. All other factors such as feed costs and macroeconomic variables were held constant among the scenarios. The model was then simulated from 1991 to 2000 and the results are presented in real dollars using the Consumer Price Index base year 1982-1984=100.

## Simulation Results

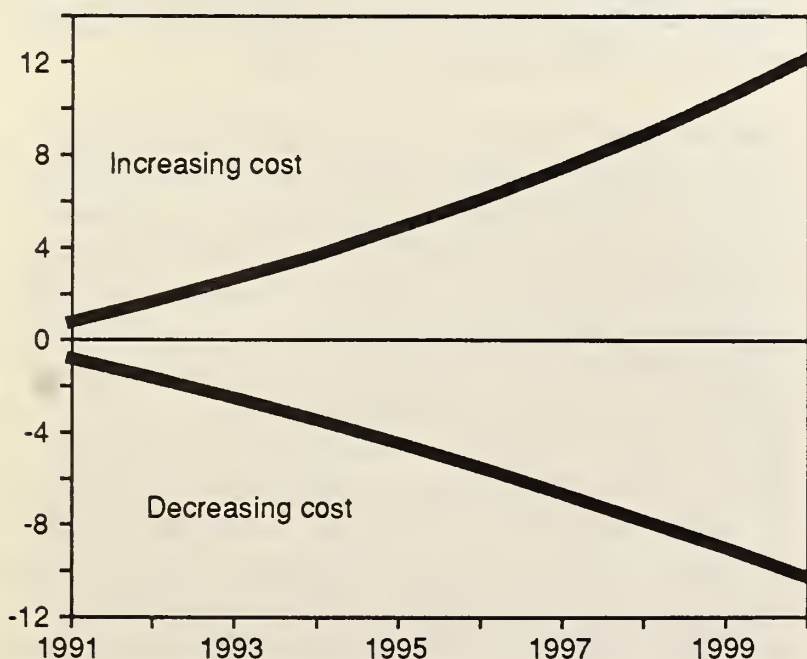
### Impact of Different Cost Assumptions on the Broiler Industry.

The difference between broiler consumption in the increasing and decreasing costs scenarios is about 4.6 pounds per person by the end of the 10-year simulation period (table 1). Per capita consumption in the increasing cost scenario is about 2.5 pounds less than the base solution by the end of the simulation. Conversely, broiler consumption is about 2.2 pounds higher than the base solution under the assumption

Figure A-2

### Total real cost differentials for broilers

Cents/lb.\*



\* Deflated by CPI base year 1982-84=100

Table A-1--Per capita consumption impact of changing broiler costs.

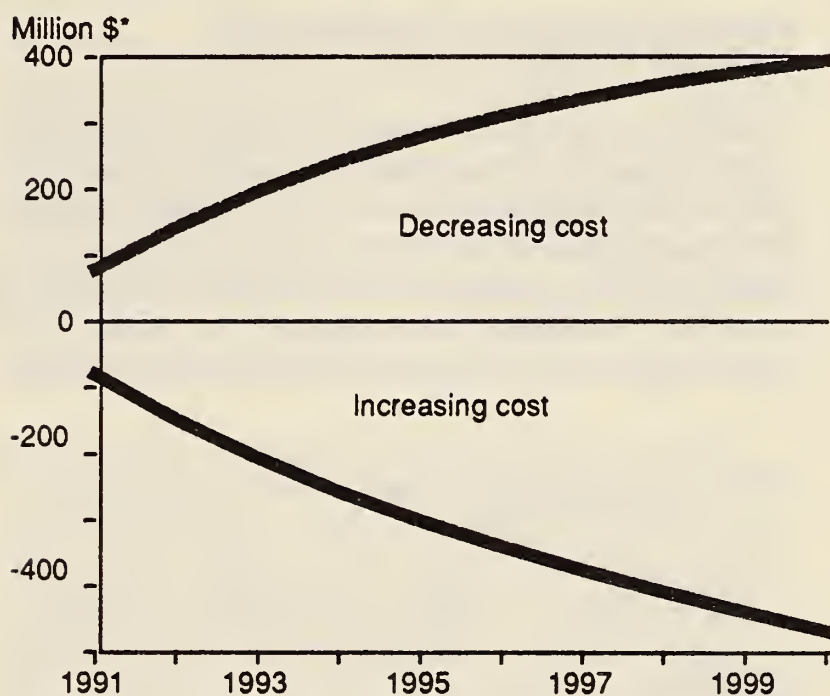
|                         | Beef    | Pork    | Broiler | Turkey |
|-------------------------|---------|---------|---------|--------|
|                         | pounds  |         |         |        |
| <b>Increasing costs</b> |         |         |         |        |
| 1991                    | -0.0012 | -0.0015 | -0.0806 | 0.0005 |
| 1992                    | -.0055  | .0048   | -.2136  | .0021  |
| 1993                    | -.0102  | .0194   | -.3904  | .0049  |
| 1994                    | -.0131  | .0392   | -.6045  | .0086  |
| 1995                    | -.0131  | .0640   | -.8508  | .0134  |
| 1996                    | -.0101  | .0932   | -1.1256 | .0188  |
| 1997                    | -.0040  | .1257   | -1.4248 | .0250  |
| 1998                    | .0056   | .1610   | -1.7462 | .0315  |
| 1999                    | .0196   | .1981   | -2.0911 | .0386  |
| 2000                    | .0368   | .2367   | -2.4557 | .0459  |
| <b>Decreasing costs</b> |         |         |         |        |
| 1991                    | .0012   | .0015   | .0794   | -.0004 |
| 1992                    | .0054   | -.0048  | .2076   | -.0020 |
| 1993                    | .0099   | -.0191  | .3749   | -.0047 |
| 1994                    | .0122   | -.0378  | .5735   | -.0083 |
| 1995                    | .0118   | -.0608  | .7971   | -.0126 |
| 1996                    | .0083   | -.0874  | 1.0413  | -.0175 |
| 1997                    | .0018   | -.1162  | 1.3011  | -.0226 |
| 1998                    | -.0080  | -.1465  | 1.5732  | -.0283 |
| 1999                    | -.0217  | -.1776  | 1.8577  | -.0339 |
| 2000                    | -.0383  | -.2087  | 2.1501  | -.0395 |



Table A-2--Price impacts of changing broiler costs.

|                         | Real<br>Fed<br>Steer<br>Omaha | Real<br>7-market<br>Barrow<br>and Gilt | Real<br>12-city<br>Wholesale<br>Broiler | Real<br>ERS<br>Wholesale<br>3 region |
|-------------------------|-------------------------------|--|---|--------------------------------------|
| ----- dollars/cwt ----- |                               |  |   |                                      |
| Increasing costs        |                               |  |   |                                      |
| 1991                    | 0.0110                        | 0.0195                                 | 0.1708                                  | 0.0449                               |
| 1992                    | .0301                         | .0316                                  | .4456                                   | .1158                                |
| 1993                    | .0534                         | .0400                                  | .7940                                   | .2070                                |
| 1994                    | .0801                         | .0500                                  | 1.2050                                  | .3144                                |
| 1995                    | .1083                         | .0578                                  | 1.6648                                  | .4327                                |
| 1996                    | .1371                         | .0640                                  | 2.1665                                  | .5596                                |
| 1997                    | .1671                         | .0694                                  | 2.7104                                  | .6973                                |
| 1998                    | .1984                         | .0734                                  | 3.2864                                  | .8413                                |
| 1999                    | .2284                         | .0770                                  | 3.8812                                  | .9835                                |
| 2000                    | .2593                         | .0806                                  | 4.5115                                  | 1.1385                               |
| Decreasing costs        |                               |  |   |                                      |
| 1991                    | -.0109                        | -.0191                                 | -.1680                                  | -.0443                               |
| 1992                    | -.0291                        | -.0304                                 | -.4324                                  | -.1121                               |
| 1993                    | -.0512                        | -.0377                                 | -.7600                                  | -.1975                               |
| 1994                    | -.0754                        | -.0461                                 | -1.1371                                 | -.2952                               |
| 1995                    | -.1004                        | -.0520                                 | -1.5482                                 | -.3995                               |
| 1996                    | -.1250                        | -.0560                                 | -1.9847                                 | -.5078                               |
| 1997                    | -.1495                        | -.0590                                 | -2.4449                                 | -.6215                               |
| 1998                    | -.1741                        | -.0605                                 | -2.9182                                 | -.7358                               |
| 1999                    | -.1965                        | -.0614                                 | -3.3907                                 | -.8433                               |
| 2000                    | -.2184                        | -.0619                                 | -3.8758                                 | -.9565                               |

Figure A-3

**Change in total broiler real net returns**

\* Deflated by CPI base year 1982-84=100

of decreasing real costs. Changes in the production levels also had an impact on the prices generated by the model. The difference in 12-city broiler prices between the increasing and decreasing costs scenarios is about 9 cents per pound in 1982 dollars by the end of the simulation (table 2). Relative to the base solution, the increasing costs scenario shows that the 12-city broiler price is about 4.5 cents per pound higher. The price is 4 cents per pound lower in the decreasing cost scenario, in 1982 dollars, by the year 2000.

Estimates of total net returns to the broiler industry reflect the relative gains and losses under the different cost assumptions (fig. A-3). Total net returns are estimated by multiplying production times net returns per unit. Total net returns are defined as net returns per pound ready-to-cook (RTC) weight as estimated by the ERS cost budgets multiplied by RTC broiler production. This is an approximation of the total net revenue of the broiler industry and is only used for comparison purposes. Under the increasing costs scenario, real total net returns are approximately \$450 million (1982 dollars) lower than the base level by the year 2000. In the decreasing costs scenario, real total net returns were about \$400 million (1982 dollars) higher than the base solution.

**Impacts of Varying Cost Assumptions on Competing Meats**

Not only is the broiler industry impacted by changes in costs but, because of competition for the consumer dollar, the total meat industry is affected. Yet, because the cross effects are small, there is little impact on prices and consumption (table 1). Per capita beef consumption is about .04 of a pound higher than the base under the increasing cost scenario. It is approximately the same amount lower under the decreasing costs scenario, by the end of the simulation. Fed steer prices are about 20 cents per hundredweight different under each scenario. Because of less competition between broilers and beef, the beef producers sell product at higher prices under the increasing cost scenario. The opposite is true for the decreasing cost scenario.

Pork per capita consumption showed the same basic trend as beef. Under the increasing costs scenario, pork consumption was about .25 pounds higher, while barrow and gilt prices are about 6 cents per cwt higher. With decreasing broiler costs, pork production is about .2 pounds less and barrow and gilt prices are about 8 cents lower per cwt. Turkey per capita consumption is about .05 pounds lower in the decreasing cost scenario and about .04 pound higher when assuming increasing broiler costs. Turkey prices are about 1.1 cents per pound higher under the increasing scenario and about .9 cents lower with decreasing broiler costs.

Total net returns to the other meat producers also changes with the assumptions about broiler costs. The total differential between the increasing and decreasing costs scenarios, by the year 2000, was about \$900 million (in 1982 dollars), for the broiler industry. The impact on the other meats was slightly less. The difference in total net returns to the beef industry is about \$130 million by the end of the simulation period. The increasing cost scenario resulted in total net returns to beef producers increasing by \$70 million by the end of 10 years. The decreasing cost scenario would reduce cow calf operators' net returns by about \$60 million. Hog producers would receive about \$30 million less in net returns if the broiler industry continues to reduce their real costs. If the broiler industry faces increasing costs, then the hog indus-



try would gain approximately \$40 million. Turkey producers are about \$50 million dollars better off under the increasing broiler cost scenario, and total net returns are about \$40 million lower under the decreasing cost assumption.

## Conclusion

In this article we addressed the impact on the broiler industry's long term performance given different cost assumptions: higher, unchanged, and lower real costs. Which of these scenarios is most likely remains open to question. Some broiler industry analysts indicate that the present technology is almost fully exploited. Any change in the future will likely be small, unless significant new technologies are found. However, the likely result is somewhere between the base and the decreasing real cost scenarios.

Also examined are some of the cross effects of these assumptions on the other meat producers. The results presented here are in inflation adjusted terms and should be used only as approximations of the relative magnitude of the results from each of these assumptions.

The broiler industry would benefit from a continued reduction in their real cost. Consumers would receive more product at lower real costs. However, increased competition from the broiler industry would reduce the returns to the beef, pork, and turkey industries. The change from a decreasing cost to a constant or increasing cost industry would make broiler meat less competitive with other meats and decrease production growth rates.

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# Market Trends Driving Broiler Consumption

by

Mark R. Weimar and Richard P. Stillman\*

**Abstract:** Changing market structure of the U.S. broiler industry and changing product form has made identifying exact demand relationships difficult, and in turn, forecasting prices more complex. Changes in price-quantity relationships are described for broilers and competing meats such as beef and pork. Results from the National Broiler Council marketing-practices survey suggests that shifting price-quantity relationships probably arise from changes in market channels and product form, as well as the opening of new markets.

**Keywords:** Marketing channels, broilers, demand, prices, quantity, National Broiler Council, consumption, disappearance.

## Introduction

The changing market structure of the U.S. broiler industry and changing product form have made identifying exact demand relationships, and in turn, price forecasting more complex in recent years. Obtaining reliable information on the changes is a continuing challenge and the available information is possibly often misleading in its implications for price forecasting. The biennial processor-and-distributor survey by the National Broiler Council helps explain some of the changes in the price-quantity relationships for broilers. (A.1)<sup>1</sup>

Some marketing changes in the broiler industry are examined in this paper. The shifts in price-quantity relationships, which have added to the complexity of predicting broiler prices, are presented. Last, the National Broiler Council market-research data are explored for further insights into some of the changes found in price-quantity relationships.

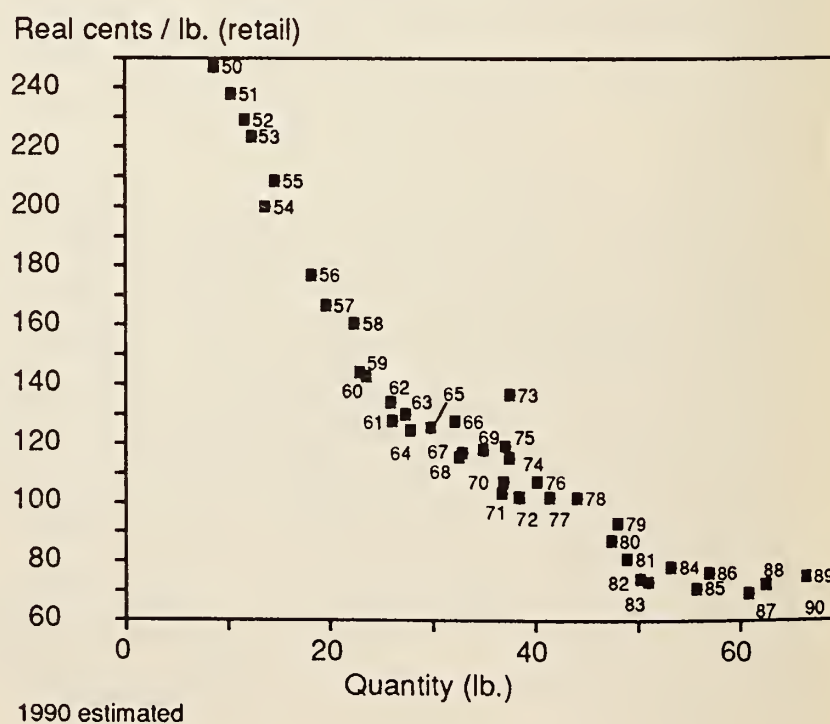
## Changing Markets and Market Relationships

Broiler integrators increased production from 1.3 billion pounds in 1950 to more than 18.6 billion in 1990 (4, 5). Factors contributing to the expanded output include vertical integration, the wider scope of markets penetrated, and increased production efficiencies through improved genetics and slaughter plants. (See accompanying article by Stillman and Weimar.) These increased efficiencies decreased the inflation-adjusted cost (real cost) per pound. This allowed broiler prices to decline relative to other meats and led to higher broiler production (3).

The relationship between the real broiler retail price and per capita broiler consumption followed a fairly consistent pattern until the 1980's (A.2). Broiler consumption and price relative to other meats followed similar patterns. Through the 1970's, increased broiler quantities led to lower real prices. However, in the early 1980's, this relationship began to change. Figure B-1 shows a fairly smooth price-quantity relationship sloping downward-to-the-right until 1982. Yet, since 1982, the curve has had little slope. This seems to imply that broiler producers can sell larger quantities at the same real price.

What has caused the apparent price responsiveness of broilers to approach zero during the 1980's? One factor might be that large decreases in competing meat supplies maintain broiler prices in spite of increased broiler production.

Figure B-1  
Broiler price-quantity relationships, 1950-90



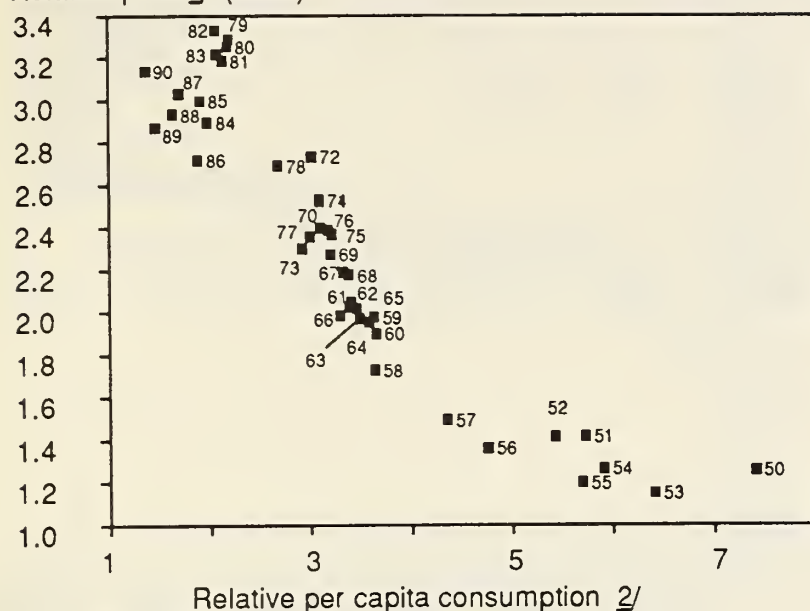
\*Authors are Section Leader of Dairy Research Section and Agricultural Economist, Beef and Sheep Analysis Section.

<sup>1</sup> All A-prefaced notes refer to appendix notes.



Figure B-2

### Price-quantity relationships: Beef divided by broilers

Relative price  $\frac{1}{\text{retail}}$ 

1990 estimated

 $\frac{1}{\text{Beef price divided by broiler price}}$  $\frac{2}{\text{Beef per capita consumption divided by broiler per capita consumption}}$ 

But did the price-quantity relationships among meats remain intact?

Relationships between beef or pork and broilers appear to have changed since 1983. Before 1983, larger quantities of broiler meat relative to competing meats induced lower relative prices. Figure B-2 shows the relative retail price of beef to broilers<sup>1</sup> compared with the relative pounds of beef to broilers consumed<sup>2</sup>. Even though broiler consumption has been gaining on the larger beef consumption since 1983, the relative price of beef has not been gaining in relation to broilers. In fact, the relationship appears to have shifted to the left.

The similar relationship between pork and broilers (fig. B-3) does not exhibit the large change displayed between beef and broilers, but there is a change. Not only does the relationship appear to move to the left, but relative pork prices appear to fall as relative pork production falls.

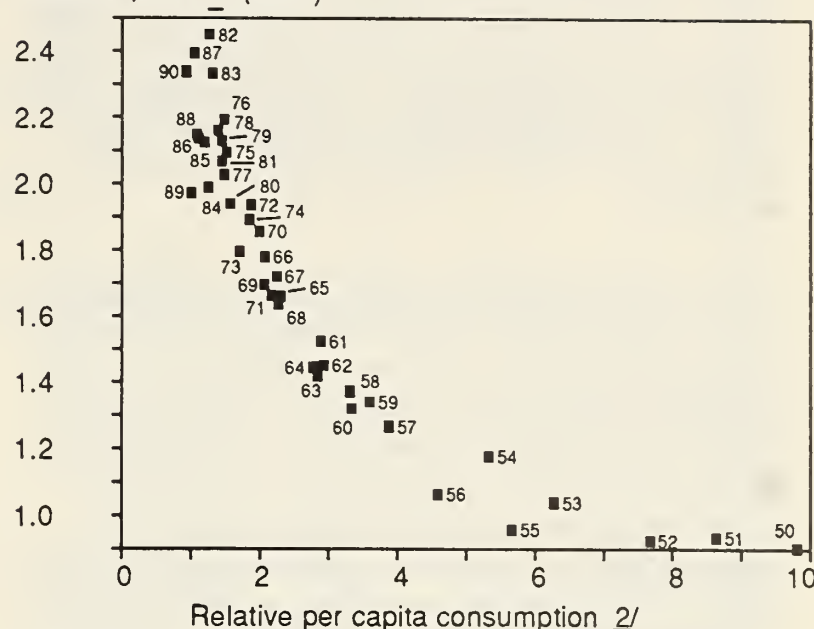
Thus, the previously mentioned relationships appear to have changed. However, did the shift occur because of changes in consumer tastes and preferences, market structure, and/or data collection? The NBC survey in tables 1 and 2 details two of these categories: market structure and the data being collected.

<sup>1/</sup> Beef price divided by broiler price.

<sup>2/</sup> Beef per capita consumption on a carcass weight basis divided by broiler carcass weight per capita consumption.

Figure B-3

### Price-quantity relationships: Pork divided by broilers

Relative price  $\frac{1}{\text{retail}}$ 

1990 estimated

 $\frac{1}{\text{Pork price divided by broiler price}}$  $\frac{2}{\text{Pork per capita consumption divided by broiler per capita consumption}}$ 

Retail grocery stores share of total volume, although still the single largest outlet for broilers, dropped from 70 percent in 1970 to 51 percent in 1989. Thus, if a Bureau of Labor Statistics' (BLS) retail whole fryer price or price index for 1989 is used in aggregate demand analysis, the index only represents about half the market at most. The assumption is that retail prices reflect what consumers are willing to pay for broiler meat in restaurants, fast food places, and institutions (HRI). The rest of the cost in the HRI product is the service provided. Furthermore, in 1989, less than 20 percent of the product sold was whole fryer.

The NBC survey began including information on fast food places and restaurants in 1970. The two market shares, taken together, have been relatively stable, from a low of 23.5 percent of volume in 1981 to a high of 31 percent in 1985. Even though the combined markets have remained somewhat constant, the split between the two has moved in opposite directions. While fast food places gained market share until 1987, restaurants lost share.

The market which gained most of the lost market share in retailing was the category labelled "Total others." The "Total others" category rose from 1.7 percent of total production in 1981 to 13.8 percent in 1989. "Total Others" markets contain segments for "Brokers" and "Renderers and Pet Food." Product shipped through brokers was assumed to be shipped to other food processors, and to specialty food organizations such as Mom-and-Pop restaurants.

The category, "broiler meat sent to renderers and pet food concerns," contains product which has passed U.S. Depart-



ment of Agriculture inspection and was classified as whole-some. This category grew from 1.7 percent in 1981 to 11.6 percent in 1989 and includes mostly backs, necks, skin, bones, and giblets. Giblets tend to be livers and hearts, but not gizzards (A.3). A minute proportion appeared to be fat and some meat that spoiled in the marketing process. The 1987 NBC survey respondents verified the breakdown of the products rendered, although they indicated that a small amount of product was ice-packed parts such as breasts, legs, and thighs.

Thus, a large portion of the market share lost by retailers according to the NBC survey was shipped to renderers and pet food manufacturers. This in turn reduces the quantity entering the retail broiler meat channel. How would this impact the price-quantity relationships? An increasing proportion of lower-valued parts of the broiler are being removed from the human food channel. The remaining, smaller quantity of retail meat is higher-valued parts and whole fryers. Smaller relative quantities of whole fryers could help explain their higher price relative to other meats.

Another aspect of the changing market structure that might impact price relationships is the distribution of broiler meat to first buyers. Broiler processor volume shipped directly to retailers has remained mostly in the lower 30 percent range since 1978. Product shipped to distributors fell from 48.8 percent to 29.7 percent of total volume in 1987. Their share rebounded somewhat in 1989 to 32.3 percent. Direct shipments to hotels, restaurants, and institutions varied between 9 and 15 percent between 1978 and 1989.

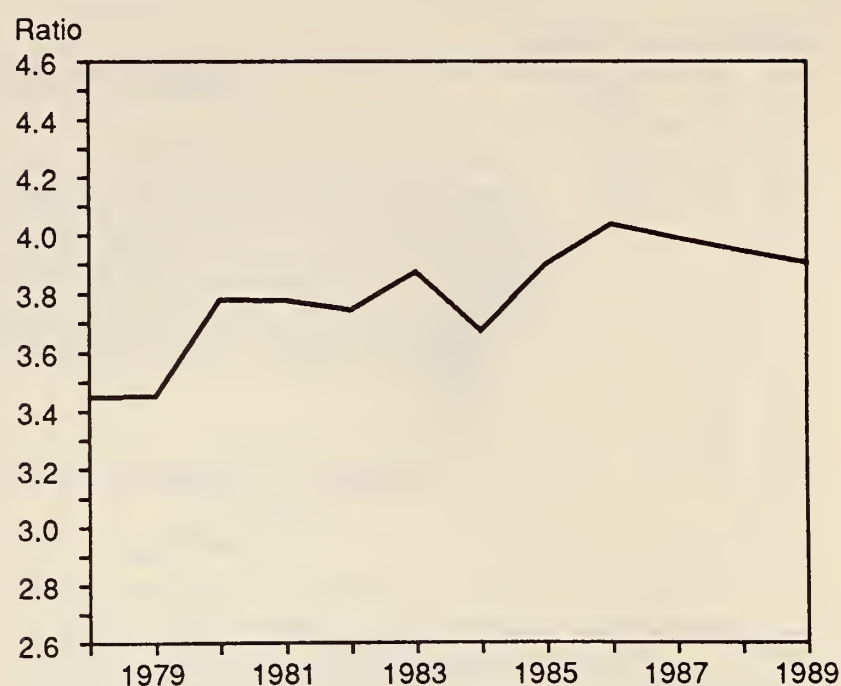
Two markets to which broiler producers increased their direct shipments were further processors; and to renderers other processors, and brokers. Direct shipments to further processors rose rapidly from 0.6 percent in 1974 to 6.7 percent in 1983 and remained fairly constant thereafter. Direct shipments to brokers, renderers, and other processors rose from 2.4 percent to 14.5 percent by 1989. This corroborates the previous end-use estimates of product shipped out of the human food channel.

Changing product form will impact market pricing. (A.4) Whole broilers were the mainstay of retail product in the early 1960's, at 87.1 percent of all processor volume sold. By 1989, whole broilers had dropped to 18.3 percent, according to the NBC survey.

The volume of parts marketed rose rapidly through the 1960's and 1970's, but settled at the upper-40 to lower-50 percent of production between 1981 and 1989. At the same time boneless product rose from 3.8 percent to 11.1 percent of production. The marketing of boneless product probably caused some of the changes seen in figures B-1 to B-3 because of lack of boning capacity to meet demand. The wholesale price of boneless, skinless breast meat rose in rela-

Figure B-4

#### Boneless breast to whole fryer wholesale price ratio



tion to wholesale whole fryer prices (fig. B-4). As the boning capacity caught up with quantities demanded during the late 1980's, the ratio began moving lower.

#### Summary

Relationships between prices and quantities of competing meats appear to have changed in the 1980's. The broiler price-quantity relationship appears to have become flatter since the early 1980's. At the same time, relative price-quantity relationships between broilers and competing meats such as beef and pork appear to have shifted. Consequently, less relative beef and pork are being consumed at lower relative prices.

National Broiler Council survey data help explain some of the change. Market structure and product form in the 1980's have changed radically from the 1960's and 1970's. At the same time, the proportion of sales through retail outlets declined from nearly 70 percent in the early 1970's to about 50 percent in the 1980's. Product form has shifted away from whole broilers in the 1960's and 1970's. Parts, further processed, and shipments to renderers and pet food manufacturers now make up the majority of the product sold.

Thus, there may have been an over-reporting of the quantity of broiler meat actually sold in human food channels as published in ERS consumption data. The broiler industry has changed product form to meet consumer demands by marketing lower-valued products to pet food manufacturers and renderers and providing higher-valued parts and fryers in the meat market. While consumers might actually purchase less broiler meat for their own consumption, the product also sells at a higher retail value than the whole fryer price.



Table B-1--Final broiler markets by percentage of volume.

| Outlet                | Year | 1960 | 1962 | 1967 | 1970  | 1974  | 1978  | 1981  | 1983  | 1985  | 1987  | 1989  |
|-----------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Final Market          |      |      |      |      |       |       |       |       |       |       |       |       |
| Retail grocery stores |      | 31.6 | 36.0 | 45.1 | 69.9  | 68.0  | 64.2  | 63.6  | 60.6  | 53.9  | 52.4  | 51.2  |
| Hotel, restaurant     |      | 1.5  | 3.3  | 3.5  | 26.9  | 28.0  | 24.2  | 23.5  | 26.0  | 31.0  | 30.5  | 29.6  |
| Foodservice           |      |      |      |      | 17.7  | 19.8  | 6.7   | 8.0   | 9.8   | 13.1  | 8.4   | 11.4  |
| Fastfood              |      |      |      |      | 9.2   | 8.2   | 17.5  | 15.5  | 16.1  | 17.9  | 22.1  | 18.2  |
| Government            |      | 1.6  | 1.4  | 1.5  | 2.2   | 2.2   | 3.4   | 1.8   | 2.0   | 3.4   | 1.7   | 1.2   |
| Institutions          |      | 2.9  | 3.2  | 1.3  | 1.0   | 0.3   | 1.9   | 2.3   | 2.1   | 3.8   | 1.3   | 0.7   |
| Exports               |      | 6.0  | 3.8  | 3.7  | 2.3   | 1.6   | 6.3   | 7.1   | 4.4   | 2.8   | 5.4   | 3.5   |
| Total others          |      |      |      |      |       |       |       | 1.7   | 5.0   | 5.2   | 8.7   | 13.8  |
| Brokers               |      |      |      |      |       |       |       | 0.0   | 0.0   | 0.0   | 2.0   | 2.2   |
| Renderers & pet food  |      |      |      |      |       |       |       | 1.7   | 5.0   | 5.2   | 6.7   | 11.6  |
| Grand total           |      | 43.6 | 47.7 | 55.1 | 102.2 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: "Broiler Industry Marketing Practices..." National Broiler Council, various issues.

Table B-2--Percentage of processors' volume sold in the United States in various forms

| Type                   | Year | 1962  | 1967  | 1970  | 1974  | 1978  | 1981  | 1983  | 1985  | 1987  | 1989  |
|------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Whole                  |      | 87.1  | 77.0  | 72.9  | 65.3  | 54.7  | 43.9  | 37.3  | 31.4  | 26.9  | 18.3  |
| Cut-up or parts        |      | 12.9  | 23.0  | 27.1  | 34.7  | 40.4  | 46.2  | 54.2  | 49.2  | 52.3  | 50.4  |
| Controlled atmosphere  |      |       |       |       |       | 3.2   | 2.9   | 1.7   | 4.7   | 3.6   | 4.0   |
| Boneless-unprocessed   |      |       |       |       |       |       | 0.9   | 0.4   | 5.0   | 5.1   | 7.6   |
| Further processed      |      |       |       |       |       |       | 5.3   | 4.1   | 6.2   | 8.2   | 6.3   |
| Pet Food but wholesome |      |       |       |       |       |       |       |       |       | 3.1   | 11.6  |
| Other                  |      |       |       |       |       | 1.7   | 0.8   | 2.3   | 3.5   | 0.8   | 1.8   |
| Grand Total            |      | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total boneless         |      |       |       |       |       |       | 3.8   | 4.2   | 9.2   | 11.5  | 11.1  |

Source: "Broiler Industry Marketing Practices..." National Broiler Council, various issues.



## References

1. *Broiler Industry Marketing Practices: Calendar Year 1989*. Washington, D.C.: National Broiler Council, ca. July 1990.
2. *Broiler Industry Marketing Practices: Calendar Year 1987*. Washington, D.C.: National Broiler Council, ca. July 1988.
3. Easterling, Edward H., and Floyd A. Lasley. *Estimating Costs and Returns for Poultry and Eggs*. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, Staff Report No. AGES850703, July 1985.
4. U.S. Department of Agriculture. *Egg and Poultry Statistics through Mid-1961*. Washington, D.C., Economic Research Service, et al., Statistical Bulletin No. 305. March 1962.
5. U.S. Department of Agriculture. *World Agricultural Supply and Demand Estimates*. Washington, D.C., Economic Research Service and Foreign Agricultural Service, WASDE-246, September 12, 1990.

## Appendix

1. The National Broiler Council Marketing Practices Survey has been taken in 1960, 1962, 1967, 1970, 1974, 1978, 1981, 1983, 1985, 1987, and 1989. The survey of processors and distributors has become more complete over time, encompassing 17 percent of production in 1960 and climbing to 92 percent in 1989. The survey has covered more than half of production since 1974.

A distributor's section was begun in 1981 and the percent of volume covered has been variable. The percent of volume was 51, 44, 66, 32, and 19 for the years 1981, 1983, 1985, 1987, and 1989, respectively.

The early processor surveys were not as complete, and therefore are not as valuable in determining changes in market channels and product form. The survey became more reliable in the 1970's and probably is most reliable since 1981.

2. Per capita broiler consumption is calculated by the Economic Research Service, USDA, using the following formulas:

Total production = Federally inspected production + other production

Total supply = Total production + beginning stocks + imports

Total consumption = Total Supply - exports - ending stocks

Per capita consumption = Total consumption / total population

The ready-to-cook weight of broilers produced includes skin, meat, bones, fat, and giblets. Carcass weight production for beef does not include skin nor edible offals except the kidneys. Carcass weight production for pork includes skin but does not include any edible offals.

3. Personal communications with a representative of Kal Kan Pet Care.

4. The National Broiler Council survey data is probably the best source of information on product forms. Even though the USDA Food Safety and Inspection Service (FSIS) collected data until September 1988 on quantities of broiler meat further processed and cutup, the primary reason for its collection was not to determine product shares. The data, rather, was collected to reflect the pounds of meat inspected. Because meat is reinspected on cutup and further processing lines regardless of previous inspection, some double counting occurs.

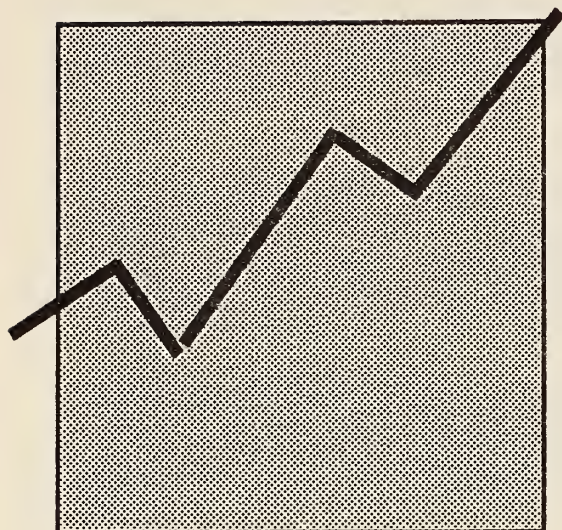


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